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Agricultural.

Cultivation of the Pear.

For many years the pear has been the favorite fruit for cultivation and experiment among the amateur fruit growers around Boston. Those who grow fruit for commercial purposes only or chiefly may have preferred the strawberry, and in some cases other fruits, but almost every man who has had a plot of land not occupied by buildings has put in pear trees, few or many, as space and means allowed. Much of this was doubtless due to the enthusiasm of the late Hon. Marshall P. Wilder and some of his associates in the Massachusetts Horticultural Society.

Not a little, however, has been due to the tree and the fruit. It comes into bearing much earlier than the apple, varying from the second year on dwarfs to perhaps eight or ten years when grown as a standard, the trees slow in maturing often giving satisfaction even while barren, by their almost perfect form and foliage. It has been aided by the fact that being mostly grown upon a small scale they put in several different varieties in close proximity, and thus insured that cross pollination which is now thought to be very essential to obtaining best results.

As a commercial crop the pear has not been a failure here under good care, when not planted in large blocks of one variety. There are records of \$500 per acre for value of fruit on standard trees, and up we think to \$2000 per acre for dwarfs, when closely set and given high cultivation.

With this record one would think that the preference would be for dwarfs or trees grafted on the quince stock, but there are some disadvantages to counterbalance the advantages of dwarfing. The dwarfs may be set much nearer together, or from a half rod to twelve feet. They come into bearing, or most of them do, in the second or third year, and the labor of gathering the fruit is not so great as on the taller trees. The disadvantages are that the dwarfs will not last as long or bear as much fruit when fully matured. The life of the dwarf was formerly placed at seven to ten years, though there are some varieties that under good care have lasted productive for twice those periods. But this is dying young compared to many standards which are vigorous after having been producing for fifty years. The pear tree planted by Governor Endicott in Danvers, Mass., in 1628, is living, or was a few years ago, and bearing fruit, though not of quality equal to more modern varieties.

But one of the main objections to the dwarf pear tree has been that some of our best standard varieties have not succeeded well as dwarfs. They outgrow the capabilities of the quince root to supply food and moisture. Of these the Bartlett, Sheldon, Seckel, Lawrence, and some less known later varieties are most prominent examples. The Beurre Rose does best when double worked on the quince, that is, a more rapid-growing variety grafted on quince and Bosc on that. The Louise Bonne de Jersey does well on either pear or quince stock, and Vicar of Winkfield, Beurre Diel and Duchess de Angoulême are best on quince stocks, and the two last named require a strong soil and warm location to reach perfection in this climate.

These peculiarities have led in some cases to setting the large growing standards at two rods apart, and then placing three dwarfs at a half rod apart on each square rod, thus getting forty standard trees and 80 dwarfs to the acre, the idea being that the dwarfs will be about ready to cut down by the time the standards have made ground enough to fill the space. In fact, but a few kinds ever require so much space, and an orchard entirely of standards would do well at twenty-five apart, as if any were inclined to spread beyond that limit their branches might be headed in with advantage to the fruit, and some have set them at that distance, and dwarfs, peach or plum trees equidistant between them.

The soil for pears should be about the same as for an apple orchard, not too dry, but certainly well drained. It should not be too rich or too heavily manured at any time, and never with fresh stable manure or in the spring, lest it cause blight. A moderate but thrifty growth is best when young, and, in fact, at all times, but after bearing commences they will bear more liberal treatment, though fruit should not be allowed to set too thickly, not only to prevent danger of overbearing, but because a half-dozen good specimens will sell for more than two dozen of such as are found when fruit is crowded too closely on the branch. The diseases of blight and cracking of

fruit or scab may be nearly prevented by judicious use of the Bordeaux mixture, and possibly if it were carefully attended to each year they might be prevented entirely, as there may be some spots untouched by a single season's spraying that will be accountable for their appearance in certain places, or neighboring orchards may not have been sprayed and thus hold the germs. Insects do not trouble pears as much as apples, but may be treated in the same way by the spraying.

The pear tree should be pruned as other orchard trees, according to its habit of growth, though many trees need but little. If top is very compact open it out to let the sun in to the centre. If spreading too much for the room it has, head in the outer branches. It is not well to cut away much wood in one season, but a little every year if necessary, and two or three smaller branches rather

influence of generations past that never knew how they could get enough to eat until a few weeks before they died. Like Oliver Twist they could eat what was given them and then appeal for more.

And if they were filthy in their habits the fault was rather with those who thought "any old thing" or place was good enough to keep a hog in, and that they needed neither bedding nor grooming, nor clean water to drink, but a wallowing place in the mud, and a chance to lie down on hard boards when they were ready to do so, while all the filth which seemed to have no other proper place was thrown into the yard with the hogs. If our "neat cattle" were served in this way, we fear they would not merit the appellation of "neat" any more than the swine, and we are not sure that they do now.

At the Wyoming Station they made a test

and the oats at noon to eight pounds, which was found to be enough for the largest horses. This was about ten pounds of hay and six pounds of grain less than they had been feeding before when using entirely whole hay and grain. They had much trouble with colic and inflammation of the bowels under the old system, but never a case under the new plan.

We think many farmers overfed their horses, giving them thirty or forty pounds of hay every twenty-four hours, especially filling the manger that they may eat all night, also giving more grain than is necessary, causing indigestion, and they make the mistake of not lessening the amount or changing the character of the food when the animal has a period of idleness. We would use more wheat bran and less corn or corn meal than many of them do, those foods being less expensive for the same

is incapable of completely meeting the demand. At the opening of the Spanish American war the horse market was normal, the supply slightly exceeding the demand, though not to any great extent. However, with the mobilizing of the large volunteer army, conditions rapidly changed, and for ordinary stock the United States quartermasters' department was paying fancy prices. When these troops returned home it was naturally expected by the various horse dealers that these animals could be bought up for a mere song, and the inundation which was thought to follow would send the prices down to its lowest point.

But this has not been found to be the case, for England, in its operations against the Boers, looked to the United States as the largest horse market in the world, where it could obtain its horses for the mounted men and mules for wagon service. "T" is an ill-

of the water, thus making a thin whitewash. Then mix the two and stir thoroughly. Add Paris green if desired for bugs.

This may be applied in whatever way is most convenient, the aim being to cover the upper surface of every leaf as completely as possible. This can be done best and most economically of both time and mixture by means of a spray pump. But a sprinkling can or even a pail and a wisp of hay may serve the purpose in the absence of the pump. Be sure to apply liberally, using at least three barrels to the acre. Bordeaux mixture will not injure the plants if used in any amount. Do the work promptly and thoroughly or it will be of little use.

Notes on Celery.

Fine, well-bleached, tender celery is never a drug in the market, and one has little difficulty in finding good paying customers. Tough, tasteless and half-bleached celery generally goes begging unless the supply is poor, and consumers have to take what they can get. Consumers complain more about celery than any other plant because there is no vegetable that shows more variation. So much depends upon soil, climate, cultivation and bleaching that the very best seed may be made to yield a crop that is hardly fit to eat. Let customers know that a certain brand of celery is always to be depended upon for tenderness, crispness and nutty flavor and they will take no other. I have found that out from experience, and I have had little difficulty in extending the demand.

There is plenty of money in raising fine celery, and little or none in growing common or inferior plants. No one should be content with anything but strong, stocky, perfectly formed, well-rooted plants. The celery that rushes up thin and slender invariably turns out poor. It needs to be thicker and stockier. There are some seventy varieties of celery on the market, most of which have no merits at all, and they should be avoided as much as possible. Why they should be grown or advertised at all, is a mystery to me. I believe some growers go on the theory that there should be a difference between commercial celery and that raised for home use. The latter must be tender and crisp, and possibly stocky and undersized. The former must be selected for its appearance without much regard for its quality. People may for a time be deceived by appearances, and will purchase celery because the stalks are large and attractive looking, but they cannot always be imposed upon. Some day they will awaken to the fact that the undersized stalks may be better than the large, elegant looking.

But it is possible to raise good celery so that it makes a fine appearance. The chief thing is to find the variety that does the best on the soil, and which invariably produces a uniform crop of good, tender stalks. Until one discovers that for himself he has not advanced beyond the primary class in this specialty. Do not be deceived by the idea that the public does not want the kind of celery you would raise for your own table, especially if you intend to sell it to special customers of your own. If the celery appears rather undersized take the trouble to explain to your customers that that is a peculiarity of the variety, and that the quality is far superior to some of the larger and handsomer-looking stalks. After all, people buy celery to eat, and not to decorate the table with, and in the end the quality and flavor must decide its fate.—James Ridgeway, Wisconsin.

A Challenge.

Here is a challenge which gives an opportunity to test Dr. Koch's theory that the bovine tuberculosis cannot be transmitted to the human race. The one who issues it certainly has the courage to sustain his conviction.

T. L. Monson, dairy commissioner of Colorado, makes public offer to sacrifice his life if need be to prove or disprove the correctness of the Berlin physician's views. His offer is as follows:

"Firmly believing in Dr. Koch's latest theory that animal tuberculosis is not communicable to human beings, I am willing, providing a suitable annuity is provided for my family, to offer myself as a test of the theory."

"If proper provisions are made, I will either eat, or allow in any manner whatsoever tuberculosis germs to be introduced into my body, providing such germs are all taken from cattle or other animals."

"This offer is made in all sincerity, and is instigated by a bona-fide desire to test a valuable theory, and by my firm belief that Dr. Koch is right."

Some years ago we made a similar offer in different terms. We asked no annuity, but agreed to make the meat or milk from cattle condemned by the tuberculin test a part of our food at each meal for thirty days, if it would be provided for us, and we are not particularly fond of either milk or fresh beef. We renewed that offer today with certain conditions, and add the privilege of inoculating us with the fresh blood of such animals, only stating that meat or blood shall not be taken from any part where there is what is supposed to be a tuberculous tumor, or ulcer, or the milk from a cow that is supposed to have tuberculous udder, or even a case of garget or mammitis, and that the animal shall not have had tuberculin injected within thirty days. We do not fear tuberculosis from such treatment, but do fear blood poisoning. M. F. Ames.

Jimmy Gatoomb recently drove Borlaima to the half of a work-out mile at Hartford in 1:10, and finished the mile in 2:09. Jimmy says the gelding stepped the third quarter in thirty seconds, the final quarter in 29 seconds. Who will say that Borlaima has not a license to tackle Crescens and The Abbot.



AYRSHIRE COW—BEST TYPE.

than a large one unless the latter is dead or dying. Summer or fall, even up to December, is better time to prune than the spring, when trees are full of sap.

No small measure of success in pear culture must depend upon perfect ripening of the fruit. Nearly all pears are better if they are picked before quite mature, and allowed to ripen in a dark, cool, but dry place, or at least not too moist, but they should be well grown before picking. A common rule is to begin picking when first mellow windfalls drop, but not always a safe rule. It may be well in some cases to leave the fruit in center or on north side of a tree a few days longer than those more exposed to sun. The late winter pears should be left on the tree as long as may be without danger from frost. Some growers pack at once in closely headed barrels, and where cold storage is available they keep well off if they are picked at the right time and carefully packed, avoiding any bruising. Wrapping in cotton or in newspaper is thought to injure the flavor. One grower whose fruit sold at high prices used to pack in layers with woolen cloth between them.

The grower in this, as in all the methods of cultivation and care, should try to familiarize himself with the peculiarities of each variety. New varieties are being introduced almost every year, but we have not seen any that were much superior to the old standards we have named above, and many that were inferior in some respects. The much-planted Kieffer has not proved of first-rate quality grown in the Northern States, but is better farther south. Perhaps the cross pollination to which we alluded as desirable for the proper fertilization of blossoms, planting several different varieties near together, may result in the production of some desirable new seedlings.

Live Stock Notes.

We have heard of some one who thought Adam would have been puzzled to know what to call all the animals, as narrated in Genesis, chapter 2, verse 19 and 20, but said, "any one would know the name of the hog if they saw him eat." But the hogish way of eating not entirely due to the nature of the beast. A part may be charged to the manner in which he has been fed for generations. He has been the scavenger of the farm, to utilize the waste products, the slops and dishwater, green fruit and immature vegetables, most of which were so lacking in nutrition that while they filled his digestive organs they by no means satisfied his hunger. They kept him alive, but he always had an appetite and craving for food that was never satiated until he was more than a year or perhaps two years old, when he was given corn meal to finish him off, or to harden the pork, which up to that time had been soft and watery, simply because he had fed only on soft and watery food. The pig taken from a well-nourished sow when eight weeks old, and fed to weigh 200 pounds at six or seven months old, is but little more greedy or hogish in his mode of feeding than any other of our domestic animals, and if he is it may be due to the hereditary

of the value of native hay and alfalfa for feeding one hundred lambs, and the results are interesting not only as a test of their value, but as showing the amount of food required by a fattening lamb: One hundred lambs were divided into two flocks as nearly alike as possible, the one to be fed hay weighing an average of 48.2 pounds each, and the one on alfalfa 47.9. On hay the fifty lambs used fifty-three pounds of hay and forty pounds grain a day as an average for ninety days, and gained 24.1 pounds each as a result. The food eaten was valued at \$4.31 per each hundred pounds of gain, or a little more than \$1.08 per head, and as they sold at \$4.65 per hundredweight, there was a profit of thirty-four cents on each hundred pounds.

Those on alfalfa did better. They ate 72.5 pounds of alfalfa hay and forty pounds of grain a day for the same time, and gained 30.8 pounds each. The food value was \$3.76 for one hundred pounds of gain made, and selling at the same price as the others the profit was eighty-nine cents per hundred pounds. The hay and alfalfa were figured at the same price, \$6 per ton. Averaging both lots, their value was about \$2 per head when they were put up, the cost of feed was \$1.13 each, and the selling price \$3.38, a profit of twenty-five cents per head. For those fed on alfalfa it was much larger than those on hay. Good clover hay has a higher value than alfalfa for feeding, but farmers in that section prefer the alfalfa because of the larger crop per acre.

At the Wisconsin Experiment Station they have been crossing the pure bred Poland-China sows with "razor-back" boars which were found wild in the Indian Territory. The first results have proven very favorable, resulting in a large increase in the number of pigs produced, one sow that had never produced more than three or four pigs at a litter bringing nine as the result of the cross. While the pigs have a longer snout and are less blocky than the Poland-China, they are called of a fine type and are of remarkable robustness and vitality. They also show good feeding qualities. If this introduction of wild or partially wild blood proves a success, we may produce the true type of bacon hog.

The London Omnibus Company some years ago, with 6000 horses, gave 3000 of them 13 pounds of hay and 19 pounds of oats a day. The other 3000 had 7 1/2 pounds of hay, 2 1/2 pounds of straw, and 16 pounds of ground oats. This ration at that market cost about five cents a day, or \$18.25 a year less than the whole hay and grain, but those having cut hay and ground oats kept in flesh as well and did their work as well as the others. With 6000 horses the saving of \$300 per day in feed bills was an important item. In an experiment with large horses doing heavy work, the feed given at first was four pounds cut hay, five pounds ground oats and barley, one-half pound of bran night and morning, and four pounds of whole oats at noon without hay. This was thought insufficient and the hay was increased to five pounds night and morning

amount of nutrition than ground oats and barley, in this country.

Notes from Washington, D. C.

Close upon the heels of the statements of various scientists throughout the country, antagonizing the theory of Dr. Koch that animal tuberculosis cannot be communicated to human beings, T. L. Monson, the State dairy commissioner of the State of Colorado, has offered himself as a subject to permit a thorough test of the matter. Mr. Monson, states telegraphic advices to Washington, is a firm and strong believer in the Koch theory, but at the same time he is not willing to make the sacrifice on the altar of science, unless, in case he is wrong, his family be provided for by an annuity to be paid them in case of his death. Officials of the Bureau of Animal Industry hardly believe that the experiment will be made.

The Department of Agriculture has also learned that Dr. Koch's theory is now to be also tested in Chicago, where several men are now undergoing the experiment of inoculation under the direction of the acting commissioner of health. The experiment is made with skin tuberculosis—lupus—a form of the disease which is curable and controllable. It is claimed that just as satisfactory a test can be made by inoculating the skin of the human being with bacillus from the animal as could be obtained from experiments with pulmonary tuberculosis. The one is feasible because it does not endanger life. Several offers have been made in that city from persons willing to subject themselves to inoculation with the more serious species of bovine tuberculosis, but inasmuch as the tests being made are all that is required, these additional offers will not be accepted.

Mr. Frank E. Emery, the special expert of the dairy division of the Department of Agriculture, has just returned to the United States from a trip to China, Japan and the Philippine Islands, where he was sent at the instance of the chief of the division, for the purpose of obtaining for the United States a demand for its dairy products in the Orient. He has also looked over the ground with a view of extending the business of this country in the dairy line there, and from advice which he has sent to the department, it is hoped that he will become a leading factor in this line of work. As he will probably remain in San Francisco, where he has just arrived on an army transport, it is probable that the actual result of his labors will not be given to the public for several weeks.

The advent of the bicycle, its increased use and then the introduction of the automobile, all were factors which the wise said would lower the price of horses and increase the surplus supply. The horse, man's companion and friend, which has aided him in wars, travel and labor, is even more in demand now than ever before, and it is safe to believe these conditions will continue indefinitely.

From those who travel all over the country it has been found that the horse supply

wind that brings nobody some good," tritely goes an old saw, for the war of the British against the Boers has put money into the pockets of our horse breeders and dealers. Colonel Skinner of the British army, who has been stationed in this country since the outbreak of the Boer war, buying horses and mules, is authority for the statement that his government has purchased over one hundred thousand animals from Missouri and Kansas, at an average price of \$50 per head, thus making the total expenditures in these States alone of at least \$5,000,000.

These demands have sent the prices again up to the former high level, and when big German orders for cavalry mounts for China made big inroads upon the American supply, the purchaser was glad to obtain a good horse at even a heavy advance upon the price paid by the War Department.

A Washington dealer, in speaking of the scarcity of good horses, said: "Work horses are in great demand at the present time. An animal that would bring \$50 to \$75 two years ago is selling for \$100. Draught horses are especially scarce, and the prices have advanced over \$100. During the summer months I do not find much demand for driving horses and coach horses, but in the winter this trade is large, and from present conditions there is every prospect for a big advance in the prices of these animals, owing to our inability to procure them."

"Instead of the automobile and bicycle hurting the trade, as far as I can see," he concluded, "the prices for horses have been better since their introduction, but then the various wars at home and abroad have helped all of this." GUY E. MITCHELL.

Blight on Potatoes.

Potato blight is threatening Vermont fields. Unless proper measures are promptly taken to meet this disease there will be serious damage to the crop. Professor Jones, botanist of the Vermont Experiment Station, has been visiting potato fields and stands back of this information.

The professor reports that he has very recently found the first symptoms of the late blight. In no case was it very far advanced. A few leaves on each affected hill showed the brownish black spots, and when examined carefully on the under side each spot revealed the delicate white mildew which is the cause of the disease. Prompt application of Bordeaux mixture in such fields is the only thing that can prevent serious loss from blight and rot.

If any farmer is in doubt as to whether his potatoes have the blight or not it will be best to send specimens by mail to the experiment station, Burlington, Vt. The best way to send such specimens is to roll them in newspaper, since they do not blacken and decay so quickly thus as when packed in a box.

The best remedy for late blight is the Bordeaux mixture, which is made as follows: Take 1 1/2 pounds of blue vitriol (copper sulphate) and 1 pound of quick lime (not air slaked), to ten gallons of water. Dissolve the vitriol in one-half the water, slake the lime in another vessel and add it to the rest

Agricultural.

Dairy Notes.

We doubt if a large share of those who do not find the profit in dairying that they had hoped to may not ascribe the trouble to the practice of milking at irregular hours, and especially to late milking on Sunday morning and to letting the cows wait if there was a little extra work to be finished in a busy afternoon. We cannot speak from experience in this matter, because when making butter we usually had one can of milk to ship by the first train to the city to the owner of the animals, which obliged us to be very regular about our milking hour, and when selling milk the dealers who handled it kept open but a short time on Sunday morning, and insisted that it should be delivered as early as on any other day in the week. As we worked over hired help but ten hours a day, it was very seldom that the milking was not all done at the same hour in the afternoon.

But we notice that when experiments have been made with two lots of cows by milking at irregular hours, of one lot, and being exact as to time on another, the latter kept up their milk record much better, the former showing a decrease of about a half pound per day, or some quart and a half in one week's trial, while those that were milked at regular hours did not shrink at all in their flow. A few weeks of such shrinkage would largely reduce the total of milk production. In one case after a trial of one week of milking at irregular hours, it took three weeks of regular milking to bring them back to their normal yield, or to the condition of those which had been regularly milked during the week.

This does not mean that the hours should always be the same in winter and summer, or at exactly twelve-hour intervals. In fact, as in the season when feed is flush the cow will get a full udder in less time during the day than at night, it may be necessary to shorten the time between milking hours in the day to ten or twelve hours, but the change should be made as gradually as possible, both in shortening and extending it, unless a cow is such a heavy milker that it seems necessary to milk her three times a day. We have read of such cases, but they are so seldom found that they may be considered abnormal, as nearly every cow seems to have capacity to carry all the milk her system can secrete.

Equally important is having regular hours of feeding at the barn, and those who naturally follow if the milking hour has been regularly established. The cow, once accustomed to be fed and milked at certain times, will expect it, be ready for it, and not knowing the reason why she has to wait, will begin to worry or get uneasy, and we may consider it an axiom that worry not only takes the fat off the body, but the fat out of the milk. And this does not apply to cows alone, but to other animals, even those that are called of the higher class, or the human race. The annoyance by flies is no small worry to our animals in pastures at this season, and those who desire best results should try to prevent that by spraying with some repellent or by the plan of keeping them in a stable that is protected by screens during the day, and allowing them to feed at night.

The Milk Commission appointed by the New York County Medical Society to improve the milk supply of the city has been at work several months, and are well satisfied there is a possibility of making a great improvement. They say that last summer over 6000 children died from bowel complaints, which it is fair to suppose were due in a majority of cases to the inferior quality of the milk used.

The Milk Commission agrees to certify the milk of all dealers, if the milk comes up to its standard. A special label is furnished for this purpose. The standard required is that the acidity must not be higher than two per cent., and that the milk must not contain more than 30,000 germs or bacteria of any kind to the cubic centimetre.

The milk before testing must be in its natural state, not having been heated, and without the addition of coloring matter or preservatives. The butter fat must reach 3.5 per cent. Frequent examinations are made by experts retained by the commission. Dr. Chapin, chairman of the commission says that an important point is that the milk shall be immediately cooled and kept cool. At a temperature below 50° the bacteria cannot enter the milk and breed but slowly, while at a temperature above 50° they breed very rapidly. Absolute cleanliness and rapid cooling are the essentials. This requires some extra labor, and such milk bearing their labels should sell at seven cents a quart when other milk sells at five cents, but its use would prevent many hospital cases and many deaths.

When asked if sterilized milk was not equal to ordinary milk which met with the commission's requirements, Dr. Chapin said that it was not. "Sterilization," he said, "destroys germs, but not the toxins and poisons. Moreover it changes the milk in such a way as to make it more difficult to assimilate."

Bitter milk or cream are not at all uncommon at this season of the year, or in the spring. They may come from a variety of causes, one being the eating of weeds or leaves of bushes that impart their flavor to the milk, and can usually be prevented by providing enough of good green fodder that they will not need or attempt to eat such substances. Some cows are nearly always troubled in that way when they are far advanced toward the period of calving, and then it is due to a disease of the system manifesting itself under certain conditions. Again it may be local and limited to the one section of the udder, which may be diseased or injured in some way, and it may be cured by a local application of liniment or ointment, which may remove the trouble. Yet we have preferred to trust to a dose of saltpetre which would work upon the entire system.

In all the talk about the separator for the dairymen the Cooley creamery has been almost forgotten by us, but they have by no means lost favor with those who keep a few cows, have ice and are careful to maintain the proper temperature. The ice costs something and it is some labor to

handle it and to keep the cans clean and sweet, but they were so much of an improvement over the old method of churning pans that those who have used both are very enthusiastic over the Cooley process if they have not tried the separator. They get very nearly all the cream, especially if the cans stand twenty-four hours, and the skim milk is kept sweet, though it needs to be warmed up for the pigs and calves, which that from the separator does not. If one has more than a half-dozen cows we would advise using the separator. If less even with only one cow use the Cooley creamery instead of the open pans.

BUTTER MARKET FIRMER.

With receipts a little less than last week, and an expected increase of trade when the many vacationists return home, we find dealers a little firmer in prices than a week ago, and some claim to be actually selling extra creamery at 21 cents, but trade is very quiet and many accept 21 cents rather than lose a customer. Others have lots they will not sell at anything less than 22 cents, but not enough of that grade have been sold to make that a quotation. Western extra ranges from 20½ to 21½ cents. Northern and Western firsts and best marks Eastern goat 19 to 20 cents a pound, with seconds 18 to 19 cents. Dairy is in fair demand at 19 cents for extra Vermont and 18½ cents for extra New York, firsts at 18½ to 17 cents, and seconds at 14 to 15 cents, and low grades at 12 to 13 cents. A moderate demand for renovated at 17 cents for choice, but low grades, imitation creamery and ladies are dull at any prices from 12 to 15 cents. Boxes in good supply at 21½ to 22 cents for extra creamery, 20 cents for extra dairy and 12 to 17 cents for fair to good. Prints are better sold up, and extras average half-cent higher than boxes, lower grades at same rates. Jobbers are holding quite firm at 22 cents and hoping to get 23 cents later for best grades.

The receipts of butter at Boston for the week were 24,374 tubs and 21,323 boxes, a total weight of 1,170,315 pounds, including 6700 pounds in transit for export, and with the latter deducted the net total was 1,163,615 pounds, against 1,219,015 pounds the corresponding week last year.

The exports of butter from Boston for the week were 6700 pounds, against 305,172 pounds the corresponding week last year. From New York the exports for the week amounted to 3917 tubs, and from Montreal 26,066 packages.

The statement of the Quincy Market Cold Storage Company for the week is as follows: Taken in 3552 tubs, out 4000 tubs, stock 186,425 tubs, against 174,738 tubs same time last year. The Eastern Company reports a stock of 29,443 tubs, against 24,646 tubs last year, and with these added the total stock figures up 215,868 tubs, against 199,384 tubs the time last year, an increase for this year of 16,484 tubs.

Domestic and Foreign Fruits.

Early apples are in better supply, and demand less active, but choice lots keep well sold up. Red Astrachan are \$2 to \$3 a barrel, Duchess \$2.50 to \$3, Williams \$2.50 to \$3.50 and Gravenstein \$3.50 to \$4, Nyack Pippins \$2.75 to \$3.25, Sweet Bough \$2 to \$2.50 and Sour Bough \$1.25 to \$2.50. Pears in fair supply. Southern LeConte \$2 to \$2.75 a barrel and Clapp's Favorite \$2.50 to \$3, with but light demand. Peaches in moderate supply, Georgia, Elberta, Belle of Georgia and Chinese Free, good to choice \$1.25 to \$1.75 a carrier. Arkansas Elberta \$1.50 to \$1.75 and Maryland or Delaware at \$1.25 to \$1.75, or 50 cents to \$1 a basket. California peaches \$1.25 to \$1.50 a crate, pears from \$1.50 to \$3, plums at \$1 to \$1.50 and plums at \$1.25 to \$1.75. New York plums in 10-pound baskets at 25 to 30 cents for Bradshaw and 15 to 25 cents for eight-pound baskets. Abundant. Grapes in fair supply, but only ordinary in quality. Carolina carriers, Delaware \$1.50 to \$1.75, Niagara and Moore's \$1 to \$1.25. Hudson River Moore's \$1 to \$1.25. Blueberries in only moderate supply, and large dry berries scarce at 10 cents, soft or wet at 6 to 8 cents. Other berries practically out of the market. Musklemelon sell slowly at 75 cents to \$1 a crate for Southern good to choice, and 25 to 30 cents for fair to good. Norfolk 25 cents to \$1, Baltimore 50 to 75 cents, Maryland \$1, Jersey Jenny Lind and Gem 50 cents to \$1, Colorado Gem, fancy \$4 to \$4.25. Some large Montreal at \$1.50 to \$2 a dozen. Watermelons in full supply, large at \$18 to \$25 per hundred, medium \$15 to \$20 and small \$9 to \$12.

Oranges in only limited supply but demand light. California late Valencia 120 cents \$4.25 to \$4.50, larger counts \$4.50 to \$5, and 96 to 112 counts \$3.75 to \$4. Grape fruit scarce at \$4 to \$5 a case, good to fancy. Messina and Palermo lemons selling well at \$3.25 to \$3.50 for choice 300 or 300 counts, and \$3.75 to \$4.25 for fancy. Some 220 and 500 counts at \$2.25 to \$2.50. Maori and Sorrento good to choice \$4.75 to \$5.25, fancy \$5.50, and some extra fancy at \$6. The bulk from \$5 to \$5.50. But few pineapples coming now, only 8190 last week. Large Abaka sold at \$3 to \$4 a case and Cayennes from 15 to 20 cents each. Dates and figs unchanged. Bananas plenty, the loss from fruit steamer on Cape Ann not seeming to affect the market. Yellow are \$1.50 to \$2.50 a bunch and red scarce at \$3 to \$4.50, as to size and condition. Reports say Cape Ann dealers are not buying many this week.

The New York Markets.

Potatoes are now coming in good supply at prices high for this season of the year. Long Island at \$3 to \$3.50 a barrel, Jersey \$2.75 to \$3.25 for best, and common at \$2 to \$2.50. Sweet potatoes in moderate supply at \$3 to \$3.50 for yellow and \$2.25 to \$2.75 for red. Beets and carrots at \$1 a hundred bunches. Celery at 10 to 35 cents a dozen roots. Onions quiet. Southern baskets \$1 to \$1.12. Orange County bags \$1.75 to \$2.50 for white, \$1.75 to \$2 for yellow and \$1.50 to \$2 for red. Jersey or Long Island \$1.50 to \$2.25 a barrel for red or yellow, and \$1 to \$1.50 a basket for white. Jersey Russia turnips \$1 a box. Marrow squash \$1 a barrel, and summer 75 cents to \$1.

Cabbages scarce and Flat Dutch firm at \$4 to \$5 per hundred. Cucumbers at 15 to 25 cents a box, 40 to 60 cents a barrel, pickles at 20 cents to \$2 a thousand. Jersey egg plant \$1 to \$1.25 a barrel and peppers 50 to 75 cents or 20 to 25 cents a crate. Lettuce from \$1.50 to \$3 a case. Green corn in full supply at 75 cents to \$1.25 a hundred ears. Green peas scarce at \$2 to \$3 a basket. String beans from Boston 75 cents to \$1 a bushel box, Western New York 75 cents to \$1 a bag for green and \$1 to \$1.25 for wax. Tomatoes in fair supply and steady at \$1 to \$2 a box for Upper Jersey, \$1 to \$1.50 for Acme, 75 cents to \$1.25 for Stone and 50 cents to \$1 for Grant.

Good red apples in demand, but green stock dull and weak. Alexander and Duchess \$2.50 to \$3.50 a barrel, Gravenstein \$2.25 to \$3.25, Holland and Summer Pippin \$2 to \$3. Orange Pippin, double-head, barrels \$2.25 to \$2.50 and open-head \$1.75 to \$2 for hand-picked. Windfalls 75 cents to \$1.50. Pears in fair supply. Southern LeConte \$1 to \$2.50 a barrel, and Keifer \$1 to \$2. Bartlett's a little scarce and in demand at \$2 to \$3.50 a barrel, \$1.50 to \$1.75 a keg. Bell \$2 to \$2.50 a barrel, and Clapp's Favorite at \$2.50 to \$3, with other sorts \$1 to \$2.25. Georgia peaches 75 cents to \$1.25 a carrier, Maryland and Delaware the same, 35 to 50 cents a basket. Arkansas carriers \$1 to \$1.50. Jersey baskets 35 to 50 cents, as to variety. Plums at 30 cents for eight-pound baskets large blue, and 15 to 20 cents for green and abundance. Grapes are quiet. Southern at 75 cents to \$1.25 a carrier, all varieties. Upriver Delaware at \$1.50 to \$1.75, Moore's Early \$1 and Champion 65 to 75 cents.

Huckleberries, Maryland or New Jersey 4 to 8 cents a quart, State and Pennsylvania mountain 6 to 10 cents. Fancy Western musklemelon in demand, but nearby lots poor and dragging. Colorado \$3.50 to \$4 a crate, New Mexico \$3.50, Norfolk 30 to 75 cents for barrel crates and 25 to 40 cents for small crates. Southern 50 cents to \$1.25 crate or basket, and Jersey 50 cents to \$1 for barrel crates or half-barrel boxes. Watermelons dull at \$7 to \$18 per hundred as to size.



VIEWS OF OLD BOSTON, No. 12.

View of Washington Street, about 1886. Looking north from Noyes Brothers' store, showing Old South Church in the distance, also showing present sites of Macular, Parker Company, Gilchrist & Co., Standard Clothing Co., and Dame, Stoddard & Co.

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Boston Fish Market.

Fishermen have fared light, offshore and on the banks, and fresh fish are higher with a good demand. Market cod are 3½ cents, large 3½ cents and steak cod 8 cents. Haddock, small 2½ cents, large 4 cents. Hake 3½ cents for small and 4½ cents for large. Pollock 4½ cents, flounders 3 cents and cusk 2½ cents, soup 5 cents and tautog 4 cents, white fish 5 cents and butter fish 7 cents. Halibut in fair supply at 15 cents for white, 10 cents for gray and 8 cents for chicken. Mackerel, moderate supply at 15 cents each for large, 8 cents for medium and 4 cents for small. Striped bass steady at 12 cents a pound, black higher at 8 cents and sea bass 6 cents. Bluefish and snappers are higher at 11 cents, pompano and sheepshead 10 cents, swordfish and Spanish mackerel 12 cents, lake trout are 10 cents and sea trout 5 cents, sea perch 15 cents a dozen and yellow perch 6 cents a pound, with pickled 10 cents. Salmon are higher at 22 cents for Eastern and 15 cents for Western. Eels steady at 10 cents, but fresh tongues higher at 9 cents and cheeks 7 cents. Clams steady at 50 cents a gallon or \$3 to \$3.50 a barrel in the shell. Shrimps 85 cents a gallon, soft shell crabs \$1 a dozen, lobsters 16 cents a pound alive and 18 cents boiled. Oysters steady at \$1 a gallon for ordinary Norfolk, \$1.15 for fresh-opened Stamford and selected Norfolk, and \$1.25 for Providence River.

Women in the Flower Trade.

At the county fairs women are winning prizes for flower and vegetable exhibits. In the advertisements of seeds and plants many names of women are seen. To women is given the credit of inventing some of the new vegetables and flowers that prove successful. A comparison between this year and last year and the year before that will show that more women are doing these things than ever before, and that the number is increasing rather rapidly. All of which goes to prove that woman is making herself at home in a field of work which is peculiarly adapted to her.

This is apart from the women florists who are carrying on business like the men florists. If the class of women referred to may be judged by some known specimens, they are educated, intelligent and enterprising. Some have taken up the occupation purely from interest in it, others wish to add to an income from other sources and a livelihood. There are both spinsters and wives, and their addresses indicate that as a rule they live either in the country or in suburbs of small towns.

The growing attention given to flowers and the increasing rewards of those successful in the business are of course the causes of the development, but an interesting feature of it is the fact that some of the women are brought into the occupation by their pleasure purely. They have become interested in some one flower, have grasped nature's secret for producing the best results, developing new forms and modifying old ones, and have then found a calling provided for them in their specialty. Thus a number of women devote themselves to one flower or at most to a few flowers exclusively.

Two qualities supposed to be peculiarly feminine are used in this occupation. They are taste in arrangement and delicacy of manipulation, which is especially needed in the operations of hybridizing. The amount of really hard manual labor required by a woman who does most of her own gardening is small, and it is reduced to a minimum by labor-saving implements.

The rewards of a woman who does not make a regular business of this kind of gardening are not very great in money, but

they must be considerable enough to make the difference between strained circumstances and comfort in many circumstances. Lists of prize winners show in some instances women who have received several hundred dollars in premiums for their year's work, to say nothing of sales. These are, of course, the exceptions.

They doubtless have other rewards also. Some of these women make an interesting exhibit in themselves, they have such bright eyes, clear skins and cheerful faces, with health and good spirits indicated in every movement, in spite of the old superstition that flowers sap the gardener's strength and cause him to die young.

A curious proof of woman's success in this field is found in the statement, which is supported by good authority, that some women growing seeds and plants do business under the names of women because they find that it pays.—New York Sun.

A Nation of Giants.

Statisticians tell us that the people of the United States not only equal any but exceed most other nations in the average height of both male and female, but they also assert that statistics as far back as attainable show that the average height is gradually increasing, especially among the female portion.

We can readily believe this to be true. In 1861, in a regiment of 1000 men enlisted in eastern Massachusetts, we found but few who were taller than we were, one of them being a young man who claimed to be six and one-half feet tall, and being slim and round shouldered was sometimes spoken of as being "too tall to stand up straight out of doors." But now we are surprised as we walk the streets of Boston to notice how often we meet men, and occasionally women, who we literally have to look up to, they being some inches above six feet in height.

This has not been brought about by the methods employed by the King of Prussia, who, having enlisted a regiment of the tallest soldiers in the world, endeavored to perpetuate them by intermarrying them with the tallest women in his kingdom. In this country, where marriage is by natural selection, most frequently it seems that the tall men select the very short women, and the tall women are most frequently united to short men. If this is not a rule it occurs so frequently as to excite comment.

Some have ascribed this increased development to the increased interest in athletic exercises, ball games, golf, tennis and bicycle riding, but we think that none of these as an exercise would equal the horse back riding which was the universal custom of a century ago, when a carriage was little used excepting for the old and infirm. Yet the large majority of those we meet are comparatively young, or from twenty to thirty-five years old, with but a few beyond that age, and some with whom we have talked would not acknowledge ever having indulged in those pleasures, at least until after they had attained a full growth upward. And they seem to be better adapted to develop certain sets of muscles than to increase height.

"We used to hear it said of certain men who were undersized that 'they worked so hard when young that they had no chance to grow,' and we do not know why violent exercise with scythe and hoe should stunt the length of body and limbs any more than the exercise of those games.

We are in the position of a man who has propounded a riddle to which he does not know the answer himself, and we shall have to leave it for the scientific men to settle, unless we accept the statement of the man who said he grew tall that he might have the satisfaction of lying longer in bed.

Hotter Than This.

The high summer temperatures recorded in history show that they are nothing new. In 627 the heat was so intense in France and Germany that all the springs dried up; water was so scarce that people died of thirst. In 879 work in the fields had to be given up. In 993 the sun's rays were so fierce that vegetation burned as under the action of fire. In 1000 rivers ran dry under the protracted heat of the sun. The fish were left dry in the heat, and perished in a few hours. The stech that ensued produced the plague. Men and animals venturing in the sun in the summer of 1022 fell down dying, their throats parched to a cinder, and their blood rushed to their brains. In 1132, not only did the rivers dry up, but the ground cracked on every side, and became baked to the hardness of stone. The Rhine in Alsace nearly dried up. Italy was visited with terrific heat in 1139. During the battle of Belu, in 1240, there were more victims made by the sun than by weapons. In 1303 and 1304 the Rhine, Loire and Seine ran dry. Scotland suffered particularly in 1625; men and beasts died by scores. The

heat in several French departments during the summer of 1765 was equal to the heat in a glass furnace. Meat could be cooked by merely exposing it to the sun. Not a soldier ventured out between noon and 4 P. M. In 1778 many shops had to be closed, and the theatres never opened their doors for several months. Not a drop of water fell during six months. In 1753 the thermometer rose to 118 degrees. In 1770 the heat at Bologna was so intense that a large number of people were stifled. In July, 1793, the heat became intolerable. Vegetables were burned up and fruit dried upon the trees. Meat spoiled in an hour. The rivers ran dry in several provinces during 1821; expeditions had to be devised for grinding corn. In 1822 a protracted heat was accompanied by storms and earthquakes. During the drought legions of mice overran Lorraine and Alsace, committing incalculable damage. In 1832 the heat brought about cholera in France. Twenty thousand persons fell victims at Paris alone. In 1815 the thermometer marked 125° in the sun.—M. T. Keenan, in Boston Transcript.

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Veterinary Department.

Questions and Answers.

M. S. H.: An eight-year-old stallion three months ago had a severe attack of distemper or strangles, with a sequela of rejection of food and water through nostrils, which continues, and he is unable to eat or drink. He has lost weight and is unable to sustain life, and as a result is greatly emaciated. His throat has been blistered, and he is turned in a day to lay throat. I doubt if anything will afford him much relief; still, the treatment I suggest may help him. If you want to afford immediate relief while you are trying the other call in a competent veterinary surgeon and have him place a silver tube in the trachea so he can breathe with some comfort.

Answer: Your horse is suffering from paralysis of the organs of deglutition, and from your description it would look like a very bad case. I should try the experiment of placing a seton on each side of his throat and keep up the discharge as long as possible; also employ electricity twice a day to lay throat. I doubt if anything will afford him much relief; still, the treatment I suggest may help him. If you want to afford immediate relief while you are trying the other call in a competent veterinary surgeon and have him place a silver tube in the trachea so he can breathe with some comfort.

R. B. New York: I have a seven-year-old brood mare that is very thin in flesh. I have had her two years and she has improved some, but not as she should. For a year her ankles have been swollen, mostly behind. I have tried everything that she hardly gets enough nourishment to sustain life, and as a result is greatly emaciated. His throat has been blistered, and he is turned in a day to lay throat. I doubt if anything will afford him much relief; still, the treatment I suggest may help him. If you want to afford immediate relief while you are trying the other call in a competent veterinary surgeon and have him place a silver tube in the trachea so he can breathe with some comfort.

Answer: Your mare is evidently suffering from indigestion and a deranged condition of the liver. I would suggest that you try the following: I would give her twenty-four ounces raw linseed oil. When the effect has passed off resume the powder, and in ten days repeat the oil and continue the powder for one month. I think this will improve her condition.

R. B. H.: I have a trotting gelding that got lame a month ago while going down hill. I think the trouble is in his stiffl. When he stops he drops his hip way down and stands on his toe. He has no curb, jack or pull, his legs are good and clean. The next day he will jog sound for four or five miles then go a trifle lame, stop and stand still for a few minutes, and then he will jog and stand on toe and walk a few steps and head lame. He has put on Spanish fly solution and heel on his shoe. The point of stiffness is not ruffled from Spanish fly. Where would you say I shall I stop jogging him?

Answer: From your description I do cure it that your horse was lame in the hip joint. I should let up on him and blister his hip and also his hock on the inside, using a liquid blister, which is best for such cases. I should certainly make two applications at intervals of two weeks between, which will have a tendency to remove the soreness. Do not be too anxious to drive him until he is all right.

W. W. K., Pennsylvania: Please prescribe for the following: I have a colt four years old, March 31, 1901. I have him in pasture since Dec. 3, 1900, and I would like to work him, but he does besides his pasture six quarts of oats and the hay he wants at night. A year ago this spring he was troubled with worms and I treated him for them. I have been treating him and treated lately, but he does not seem to have any. This winter I kept him nice on one quart of oats and two ears of corn than the above-mentioned amount of feed. He has been feeding, but I have another colt 11 days old and he is not that I have kept and do yet on 2 quarts at each meal and very little hay. I should think the pasture alone ought to be sufficient to keep him in good condition. He has running water through the field and plenty of shade.

Answer: Have his mouth examined and possibly you will find one cause for his lack of thrift. Many times the supplementary molars are tardy in shedding and require assistance. I would also suggest that you employ the same treatment for him as prescribed for "R. B.," New York, as the cases seem to be somewhat similar.

R. A. B., Nova Scotia: Kindly answer the following questions and prescribe. (1) Have a pair of brown geldings, about eight and nine years old, which I purchased last February at an inland town and brought them down to a seacoast town and put them to work in the livery and I kept him nice on one quart of oats and two ears of corn than the above-mentioned amount of feed. He has been feeding, but I have another colt 11 days old and he is not that I have kept and do yet on 2 quarts at each meal and very little hay. I should think the pasture alone ought to be sufficient to keep him in good condition. He has running water through the field and plenty of shade.

them twelve quarts of oats and all the hay they can eat. Sometimes I change the feed, giving them a little cut hay and a little bran with their oats. What would you do with them? (2) Have a mare that sprang forward and has developed a large ankylosis. There appears to be a large enlargement on the inside of each leg and the mare travels very well. She has a set of feet, but I blistered them around the net, cut her down well in the heel, and put on a pair of toe shoes on her, and she now travels foot.

Answer: Your horses are evidently suffering as the result of change of location, and have been feeding them too much grain, and their teeth put in order and pursue your treatment suggested to "R. B.," New York. I should blister the mare's ankles three or four times at intervals of ten days between and her long rest.

Fish Stories.

It is not too much to say that in some of the love of salmon passeth that of women, and reach the objects of their affection they undergo hardships greater than man could do or bear, and to maintain the fight with a courage and fury which might make many a soldier envious.

The salmon trials begin when they first find the sea on their long upriver journey to their sweethearts. Presently, perhaps, they find a high waterfall. Then the salmon backs as far as possible, makes a locomotive-like leap and leaps for the top. He actually catches through the air, his tail is moving like lightning, his scales shine like silver enamel. Perhaps he fails to reach the top by a foot, but he catches the water, hangs suspended for a moment, and then with miraculous strength forces his way through the quiet water beyond.

Perhaps the next waterfall is five feet high, and the salmon leaps in vain. Then, finding the feat impossible, he actually climbs the side, jumping up from ledge to ledge and resting a little pool until the river has reached the top. Then he goes on pushing through rapid rapids, floundering over shallows until the spawning ground is reached. In many of the larger rivers of this continent the salmon is no beauty when he reaches his journey's end. His scales, perhaps, are worn off, his body is red with the mass of bruises. But, nevertheless, he works lady-love boldly, caresses her tenderly, fights his rivals fiercely, and wins his bride like a soldier.

Oysters and clams in the shell are very popular with the codfish, and there are vast heaps of dead shells in the ocean "nested" together like strawberry boxes, which are believed to have once been in the stomachs of codfish. The appetites of these fish are insatiable. They will fill their stomachs, fill their gullets and fill their mouths with food, and still try to get more.

If people knew more about the fish they eat it is possible that a slice of "baked blue" might fill many a man with shuddering horror, for the bluefish is perhaps the most terrible and blood-thirsty thing in all nature. The tiger has a sweet and cheerful disposition compared to the bluefish, the shark or the very voracious tunny, positively mild. The bluefish make menhaden their special prey. When a school of these fish perceive bluefish near they swim away with such terrified haste that the ocean foams under them, but the bluefish cannot be distanced. They rush among the helpless menhaden, mangle, thrash, and even throw them into the air.

They do not stop to swallow their prey, but kill purely for the love of slaughter. The sea is reddened with blood and dotted with dead fish, but the bluefish kill on until exhaustion stops them or until menhaden get into such shallow water that the bluefish do not care to follow. Some of these helpless fish are so blind with terror that they swim ashore and are piled up in windows a foot deep.

The bluefish do not eat one-tenth of the fish they kill, although when sufficed they are believed by some people to disgorge their food in order to take in another meal. It is estimated that during a fair season 1,000,000 bluefish are caught between New Jersey and Monmouth, and that about 200,000,000 small fish, mostly tiny or forty fish are sometimes found in the stomach of one bluefish, but placing a bluefish's kill at only ten per day it will be seen that during their four months' yearly stay on the New England coast they destroy about 1,200,000,000,000 fish, and that is excluding the vast numbers of minute fish eaten by little bluefish, which are not included in the estimate. Carried into avoidance, it is calculated that 2,500,000,000 pounds of fish are eaten daily by bluefish. Nevertheless, they are handsome and graceful fish. Very little is known of their other habits, but they are so nervous while in captivity that they develop corns on their noses by trying to push the latter through the glass sides of their tanks.—Los Angeles (Cal.) Times.

In every town and village may be had, the

Mica Axle Grease

that makes your horses glad.

China and Glass Novelties

By Steamships "Cambrin King," from Antwerp, the "Nordby," from Hamburg, and the "Cestrian," and the "New England" from Liverpool, we are landing attractive novelties.

New Designs of Table China from Minton and the Cauldon works. The wares from these potteries are particularly attractive, although most of them expensive designs.

The new shapes and decorations of Carlsbad porcelain are effective, artistic and inexpensive.

The old blue Dresden Meiss China, the old blue Canton China, and the many stock patterns English and French China, will be seen in the Dinner Set room, the floor,—always readily matched.

We have several stock patterns of the Royal Worcester standard—signs—always readily matched—and porcelain of this pottery has a peculiar excellence.

In the Art Pottery Rooms, third floor, will be seen superb specimens of bric-a-brac, adapted to wedding and complimentary gifts.

Never at this season was our stock larger, more valuable and comprehensive. Inspection invited.

Jones, McDuffee & Stratton Co.

120 FRANKLIN, Cor. FEDERAL ST.

Poultry.

Practical Poultry Points.

It is customary for some writers upon poultry topics to ascribe the gaps in chickens to worms in the throat, and the presence of those little worms to their being parasitic in the larger worms known as the earth worm or angle worm. The first part we believe, but of the latter we are doubtful. We have spaded a garden nearly all day where the angle worms were abundant, and allowed the chickens to eat them until they could swallow no more, and the discolored crop looked larger than the chicken. We have dug an hour or two in a day for many days when doing our regular work elsewhere, and given them the same privilege, yet we never had a case of gaps in our flock, and we no more believe that the angle worms are the cause than we do that eating grass produces them. They may be a product of damp and filthy ground, which is also very good propagating soil for the angle worm, but in most cases they can be found where it is the custom for the chicken's mash to be allowed to get sour in the coop or feeding trough, and they are expected or allowed to eat it before they get good sweet food again. Whether they are in any way akin to the little black fly, scarcely visible to the naked eye as individuals, but often much in evidence as a dense cloud, and often called the "cider fly" because of their numbers where cider is going through fermentation, or where apples are rotting, we cannot say, but we advise those who have microscopes to investigate the matter. And then try to have the chickens in dry ground fed with good sweet food, which shall include half the weight of the bird each day in angle worms, or as near that as can be obtained and they will eat, and the chickens so fed will not have a gap worm, while those given sour dough will have it. The only remedy we add to a teaspoonful of spirits of turpentine to a quart of grain, say one-half to two-thirds bran and balance of corn meal, and mix well before scattering. Then add a little Douglas mixture or even plain copperas to the drinking water.

The scarcity and high price of good fresh-killed chickens in our market now reminds us to again urge upon our readers to fit all superfluous cockers and pullets that do not promise to be valuable for eggs or breeding purposes for the market as quickly as possible. Each week of feeding costs money, and the gain in weight may not compensate for the decrease in price. Do not understand us as urging their sale when in poor or only half-fattened condition. That is poor policy at any time, as such stock sells at low prices at all seasons of the year. But if they were not fat enough for good broilers at 13 or two pound weights try to have them so at four or five pounds, or a little more if of the large breeds. Those are the ones that usually sell at highest prices. Chickens that show more bone than meat when dressed is never in demand. Good chickens usually sell better from August 1 to November 1 than they do later. After November begins people save their poultry appetite for the Thanksgiving turkey and the fancy roast beef or pork which comes to market then, or for the game that is in season, and not until January has passed do chickens or fowl begin to be appreciated, and even then their place as a luxury worth high prices soon gives way to the hot-house lamb. Thus the very season when the farmer by a little good feeding could have the most and best poultry to sell is the season when it sells best, and he should try to get out of the routine of saving the best poultry for the Thanksgiving and Christmas holidays.

The new paper, Commercial Poultry of Chicago, as its name indicates, deals more with the commercial side of handling poultry products than with the raising of chickens, production of eggs, or the breeding of fancy poultry. In this line we find something interesting in each number, for most poultry keepers expect to sell a part of their products at one season or another either as eggs or poultry, and those who are not poultry keepers usually have to buy of them.

In the number dated Aug. 5 it has something to say of the great number of eggs sold in Chicago at this season at from fifty cents to \$1.50 a case of thirty dozen, which certainly means a loss to producer or handler, and often to both, for the latter buys at low prices, and unless he can make quick sales a part of his stock is reduced in value after he gets it or in transportation. The editor tells of two consignments of eggs from towns in Iowa which have a first-class reputation for furnishing good eggs and poultry.

One consignment consisted of 932 dozen, which should have been worth thirteen cents a dozen, or \$121.56. They were regularly packed and properly handled by shippers, but when candled out there were 740 dozen of No. 1. There were 745 dozen of seconds, or eggs a little stale but not spoiled, and 236 dozen of cracked ones, or 1041 dozen which sold at five cents a dozen, eight cents less than value of good eggs, a loss of \$83.28. Then there were 891 dozen of rotten eggs, valueless excepting to certain classes of manufacturers to whom they might be given to save expense of taking them away and burying them. These were a total loss amounting to \$114.33. Thus there was a loss of \$197.81 on the lot, due neither to dealers nor transportation companies, but to those who gathered the eggs upon the farms in the country. If upon those who took such eggs to market the loss could all be placed at would be well, but the loss must be partly borne by those who took proper care of their eggs, unless all were alike guilty, which is not likely.

Another lot had not been properly handled, having been bought for a Chicago firm at a fixed price. The buyer wired that he could get a little more for them. They refused to advance the price. Then they were shipped to a commission house in Chicago, which refused to receive them. Then he persuaded the first house to sell them on its account. They remained some time in the commission house uncared for before the last transfer. If they had arrived in good order they would have been worth \$84.04, but in candling there were found 250 dozen No. 1, 1639 dozen No. 2, 225 dozen cracked and 1500 dozen a total loss. More than one No. 1. The loss was \$22.35, due in part perhaps to bad handling on the farm, but quite as much to delay in marketing. The loss on cracked eggs, \$16.25 in this lot, is due to careless handling by railroad employees, and is always expected.

Poultry and Game.

Poultry is in larger supply with a light demand, and fresh killed Northern and Eastern chicken are 18 to 23 cents for choice roosters and 14 to 16 for broilers. Fowls extra 12 cents, others 10 to 11 cents, spring ducks are 14 cents for choice. Pigeons choice \$1.25, and fair to good 75 cents to \$1

a dozen. Squabs in mixed lots about \$2 a dozen, but some Jumbo at nearly a pound each are worth \$2.25, and small go at \$1.75. There is a liberal supply of Western loed poultry, and steadily demand at 13 to 14 cents for spring chickens, 9 to 10 cents for choice fowl, 8 to 9 cents for common, old roosters 6 cents and spring ducks 10 to 12 cents. Turkeys 7 to 9 cents. Live poultry in fair supply, but a steady demand at 11 to 12 cents for chickens, 9 to 10 cents for fowl and 5 to 6 cents for roosters.

A few small shore birds, grass birds and yellow legs coming in at \$1 to \$1.50 a dozen, but we continue to quote retail prices. Canvasback ducks \$3.50 to \$4 a pair, mallards \$1.50 to \$1.75. Chicken grouse \$1.75. Beetle head plover \$5 per dozen, Western upland plover \$4 to \$4.50, winter yellow legs \$4.50 to \$5, summer yellow legs \$2 to \$3, grass birds \$1.50 to \$2, peeps 40 to 50 cents and Southern blackbirds 75 cents to \$1.

Horticultural.

Apple Export Trade.

A circular letter received from James Adam, Son and Co., Liverpool, says that reports so far received indicate a short crop of apples this year in England, where the largest growing districts in Great Britain are found. Of 100 records received by the Gardeners' Chronicle, only sixty indicated an average crop or over, 130 being under the average, including some of the largest orchards in the country. In one fruit garden in the county of Hertford a bushel can be had from seven acres of Standard and Bush apples.

Scotland makes a more favorable report, as of fifty-five records nearly half report an average yield, and while reports from the continent say but little, the general opinion is that the crop will be less than half the average. As the crops in the United States and Canada are acknowledged to be light, the prospects are for good prices for good fruit this year. Winter apples in England or from the Continent are usually nearly exhausted before American shipments get very large, so that they do not come in competition, but fall apples from here are in time to meet them, and their shipment is advised only in a season like this when the home supply is light.

Large quantities irrespective of quality should not be sent, but the best only selected and colored apples given the preference, as green varieties predominate in the home supply.

The "Fruit Marks" act in Canada is expected to result in better grading and packing there, and shippers from the United States should not be slow to improve in the same way. Packing in boxes is attracting much attention, and as the California boxes have been well appreciated, the better varieties of both American and Canadian growth might be put in that way to advantage. The trade in California Nectons has grown amazingly and further increase is looked for.

Chester R. Lawrence of Fruit and Produce Exchange, Faneuil Hall Market, sends the following circular to the receivers of apples:

"I desire to call your attention to the advantage of shipping your apples via Boston. From this port the fastest and finest freight steamships depart. The average length of the voyage from Boston to Liverpool and London is from seven to ten days.

The steamships that sail from here are fitted with fans, ventilators, and excellent storage for carrying apples in good condition. On through shipments from New York State, the West, South and Canada, going forward via this port, there are no port charges. The only charges are the railroads and the ocean freights. On such shipments the cars are run directly alongside the steamships, and the apples are unloaded from the cars into the steamship's hold, thereby saving handling and expense.

"Apples arriving in vessels from Nova Scotia ports are lighter at small expense to the European steamer's side, and if a sufficient quantity at one time, the vessels will unload their cargo directly into the steamer's hold.

"Furthermore, the ocean freights from Boston are generally from six pence to a shilling per barrel less than from other ports.

"There are several steamers each week from Boston to Liverpool and London, and there is little chance of any delay here.

"If at any time there is fruit in the cars that you do not care to export there is a ready market here for same.

"All things considered you will find no better port to export your apples from than Boston.

"Always send car numbers and particulars when making shipments."

The New York Sun has a despatch from Hagerstown, Md., which says the representatives of city firms are swarming all over the fruit belt in that State, buying whole orchards of apples and peaches, paying \$1.75 to \$2 a barrel for apples in the orchard, the buyers to pick and pack the fruit for shipment. Thousands of barrels have been bought at those prices. One grower near Littersburg sold his crop of 1500 barrels to a Philadelphia firm. Carloads of peaches are being sent to Baltimore, Pittsburgh, New York and Philadelphia. A new fruit train is to be put on, by which peaches loaded there in the evening will be in Philadelphia or New York the next morning. The peach crop is not as abundant as last year, but the fruit is larger and of finer quality.

One leading apple buyer in Maine says that this year there will be about 15 per cent. of last year's apple crop. One Minor orchard, it is said, will produce 150 barrels. Representative American and Canadian apple men estimate the crop of Ontario to be 50 per cent. of an average crop, New England 35 per cent., Pennsylvania 40 per cent., New York 20 per cent., Maryland 50 per cent., Virginia 65 per cent., West Virginia 65 per cent., Kentucky 35 per cent., Tennessee 35 per cent., Ohio 40 per cent., Michigan 30 per cent., Illinois 40 per cent., Missouri 20 per cent.

The total shipments of last year from this country, from July 28, 1900, to May 4, 1901, were 1,346,030 barrels. This includes 205,333 boxes of California apples. The heaviest shipments for one week were for week ending Nov. 3, 99,104 barrels; 409,079 barrels went from Boston, 240,633 from New York, 625,836 from Portland, and balance from Canadian ports.

Vegetables in Boston Market.

Vegetables are a little easier in prices this week, as the supply is more abundant. Beets are 40 cents a box and carrots 60 cents. Flat turnips 35 cents a bushel and yellow \$1.75 a barrel. Native onions coming freely now at 75 to 85 cents a bushel \$2, to \$2.25 a barrel. Look are 60 cents a dozen, chives \$1, radishes are higher at \$1 a box, and cucumbers good to fancy are \$1 to \$2 a hundred. Peppers \$1.25 to \$1.50 a box, celery \$1.25 a dozen and eggplant \$1.50 to \$2.25 a case. Hothouse tomatoes 5 to 8 cents a pound, and field grown 75 cents to \$1 a box. Marrow squash plenty and dull at



CATTLEYA TRIANAE. BY BAYARD THAYER.
Kindly loaned by the Massachusetts Horticultural Society.

75 cents to \$1 a crate, and white summer \$2 a hundred. Cabbages coming plenty. Large at \$5 per 100, small at \$2 to \$4, or 60 cents a barrel. Lettuce 35 to 50 cents a box and spinach lower at 30 to 40 cents. Parsley dull at 25 cents and endive at 50 cents. Green corn in demand at 25 to 30 cents a box. Green peas nearly done at \$1.50 to \$2.25 a bushel, as to quality. String beans weak at 40 cents for wax and 50 cents for green. Shell beans in fair supply at \$1 to \$1.25 a bushel, and a few Lima at \$2.25 and Sieva at \$2 a bushel. Receipts of potatoes are light yet. Arrostoch Hebrons are 90 to 95 cents a bushel, Pride of the South 80 to 85 cents and Red Bliss 75 cents. Rose and Hebrons \$2.25 to \$2.75 a barrel for Maine, \$2.30 for Nova Scotia and \$2.75 to \$2.75 for Rhode Island. Sweet potatoes in fair supply and prices working lower. Yellow in demand at \$3 to \$3.75 a barrel, the top price only for extra Norfolk. White and red a little dull at 2.50 to \$3.

The Hay Trade.

There is but little change in the hay market. At some points choice and No. 1 timothy is in small supply, and advances a little, and at others there is enough for the demand, which is very light. There is more new hay coming forward, but the buyers are not anxious for it, and will pay more for old hay or accept lower grades. Many are taking only small lots and are waiting for the new hay to season a little. Not much new hay has yet reached Boston.

Choice old timothy sells at \$19 to \$20 in large bales, \$18.50 to \$19 in small bales. No. 1 large bales \$18 to \$19, and small \$17.50 to \$18. No. 2 is \$15 to \$16, No. 3 \$14 to \$15. Clover mixed \$13 to \$14 and clover \$13. Straw, long rye, at \$15 to \$16, tangled rye \$11 and oat \$8. Providence is in about the same condition, and at both places some shipments of old hay, choice or No. 1, would be gladly received.

New York received 6802 tons last week, against 4768 the previous week, but 65,302 bales were exported, the steamer Agate taking 33,259 compressed bales, or over 5700 tons, to Cape Town, South Africa. A part of this came from Illinois, and a part from the stock in hand here, but the reduction of stock does not seem to strengthen prices, as there are reports of heavier shipments from the West. No fixed price for new hay although good lots are being taken at nearly equal rates to old hay. Brooklyn and Jersey (city report light receipts, with prime and No. 1 scarce, and not accumulating the demand is very small.

The Hay Trade Journal gives the highest market prices at the various points as \$29 per ton in Boston and Providence, \$19 at New York, Brooklyn and Jersey City, \$18 at Memphis, \$17 at Philadelphia and Baltimore, \$16.50 at Nashville, \$16 in Chicago and St. Louis, \$15 in Pittsburgh, \$14.50 in Buffalo and Kansas City, \$14 at Cleveland, \$13 at Minneapolis and \$12 at Duluth. The Montreal Trade Bulletin says that the exports from that city to English ports last week amounted to 25,367 bales, and to Antwerp 1572 bales. A good trade in old hay, of which farmers are delivering more than was expected. Sales of No. 2 reported at \$9.50 to \$10, and one lot graded as No. 2 sold at \$9. Clover is quoted at \$8 to \$9 as to quality. Some new hay in bales coming in, but no fixed price for it.

It is significant that the exports of broad-stuffs in July were the largest ever recorded for that month, being \$24,188,076, as against \$18,699,175 in 1900, \$21,084,005 in 1899, and \$16,737,158 in 1898. Corn and cornmeal made up 25 per cent. of the total, while about 67 per cent. is made up of wheat and wheat flour, the remaining 8 per cent. being barley and rye.

It is reported that the Armour's of Chicago are trying to buy 1,000,000 barrels of apples on the trees in Maine, and have a fund of \$5,000,000 for that purpose. If they succeed it will very nearly corner the crop in that State, as it is light and may not equal that amount.

The early potatoes in Arrostoch County are turning out well, most localities turning out 50 to 70 barrels per acre, and some as high as 90 barrels. Owing to the scarcity at other points they now sell at \$2 a barrel there. In the shipping season last year, 104 months, 6867 carloads were sent over Bangor & Arrostoch road, and this year quite as many will be sent, as with lighter yield there is a larger acreage.

Wheat, including flour, exports for the week aggregate 9,039,761 bushels, as against 8,832,159 bushels last week. Wheat exports July 1 to date aggregate 41,072,332 bushels, as against 10,944,000 bushels last season. Corn exports aggregate 508,807 bushels, as against 900,714 bushels last week. July 1 to date exports are 9,227,168 bushels, against 23,673,349 bushels last season.

Treasury bureau of statistics gives coal exports for fiscal year at \$22,317,466, against \$19,022,813 previous year.

Traffon makes the exports from the Atlantic coast last week to include 282,400 barrels of flour, 7,294,000 bushels of wheat, 10,000 bushels of corn, 28,000 barrels of pork, 11,304,000 pounds of lard, 3,008 boxes of meat.

The visible supply of grain in the United States and Canada, Aug. 19, included 29,709,000 bushels of wheat, 12,783,000 bushels of corn and 5,530,000 bushels of oats. Compared with a week previous this shows a decrease of 1,450,000 bushels of wheat and 513,000 bushels of corn, with increase of 1,004,000 bushels of oats. One year ago it was 40,761,000 bushels of wheat, 9,102,000 bushels of corn and 7,024,000 bushels of oats.

The preliminary figures of the total values of United States exports and imports for July and seven months compare as follows: Merchandise exports for July 1901, \$109,081,000, against \$100,462,000 last year and \$94,926,000 in 1899. Imports for July 1901, \$72,807,000, against \$63,000,000

last year, and \$60,100,000 in 1899. Excess of exports last month \$33,134,000. Same month last year \$36,783,000, and in 1899 \$34,824,000. For seven months ending July 31, 1901, exports were \$830,880,000, against \$807,444,000 last year, and \$783,486,000 in 1899. Imports for the same periods were \$506,337,000 last year, \$503,078,000 last year, and \$448,546,000 in 1899. Excess of exports this period \$324,544,000 for seven months, last year same period \$303,406,000, and in 1899 \$239,338,000. The packer market turned very active in all kinds of hides, native steers being in best demand. Fully 40,000 changed hands at 12 1/2 and 14 cents. All packers now asking three-quarters cent. Perhaps on combination trade might secure some at lower figure. Texas are strong. Heavy selling at 13 for future delivery—looks like a stronger market and higher prices.

The British consul at Mexico states that America is gaining all the markets in that country. The report says that if Britishers wish to retain the main trade they must change their methods.

The pork market continues very firm, with ribbed advanced one-half cent. Heavy hams \$10, medium \$12.25, long cut \$19.50, lean ends \$21, bean pork \$15 to \$15.75, fresh ribs 11 1/2 cents, corned and fresh shoulders 9 cents, smoked shoulders 10 cents, lard 10 1/2 cents, in pairs 10 1/2 to 11 1/2 cents, hams 12 to 12 1/2 cents, skinned hams 13 cents, sausages 9 cents, Frankfurt sausages 9 cents, boiled hams 12 to 14 cents, bolognas 8 cents, pressed ham 12 cents, raw leaf lard 10 cents, rendered leaf lard 10 1/2 cents, in pairs 11 to 11 1/2 cents, pork tongues \$22.50, loose salt pork 10 cents, brisquets 11 cents, sausage meat 7 1/2 cents, country dressed hogs 7 1/2 cents.

Shipments of dairy products from New York last week included 372 packages of butter to Liverpool and 200 to Bremen, 632 boxes of cheese to Liverpool, 110 boxes to Southampton, 130 boxes to Bristol, 1007 boxes to Hull, 500 boxes to Newcastle, 1667 boxes to Manchester and 149 boxes to Glasgow, a total of 3092 packages of butter, and 10,406 boxes of cheese.

Shipments of wheat are not only on an unusually large scale, but heavy engagements ahead have been made. It is evident that an enormous foreign market exists for American wheat. France, it is said, will need 50,000,000 to 100,000,000 bushels from this country, and cables tell of a possible famine in Russia.

It is declared in Fall River that the present embarrassment of coarse goods mills is due to the competition of Southern mills, which can ship coarse goods north at less cost than Fall River mills can supply them.

Over 100,000 tons of grain destined for Europe is tied up at San Francisco as a result of the water-front strike.

Famine is threatened in Russia over an area of 500,000 square miles, embracing a population of 20,000,000.

The world's grain exports last week were reported as 11,391,761 bushels of wheat from six countries, and 4,648,807 bushels of corn from four countries, of which the United States furnished 9,039,761 bushels of wheat and 2,807,807 bushels of corn. Argentine sent nearly half the corn or 2,312,000 bushels. Last week, 10,770,189 bushels of wheat, and 3,777,714 bushels of corn from same countries, of which 8,842,189 bushels of wheat and 986,714 bushels of corn were from the United States. One year ago 6,360,641 bushels of wheat, 4,082,000 bushels of corn, of which 3,143,641 bushels of wheat and 3,017,069 bushels of corn were from the United States.

Exports of live stock and dressed beef last week included 2400 cattle, 1000 sheep, 13,577 quarters of beef from Boston; 1420 cattle, 14,015 quarters of beef from New York; 648 cattle, 1100 quarters of beef from Philadelphia; 313 cattle from Baltimore; 660 cattle, 450 sheep from Portland; 650 cattle from Newport News, and 2195 cattle, 842 sheep from Montreal, a total of 8341 cattle, 2222 sheep, 27,892 quarters of beef from all ports. Of these 2724 cattle, 1000 sheep, 17,894 quarters of beef went to Liverpool, 2944 cattle, 455 sheep, 8745 quarters of beef to London; 684 cattle to Glasgow; 500 cattle to Bristol; 200 cattle to Hull; 680 cattle, 607 sheep to Manchester, 1500 quarters of beef to Southampton; 272 cattle to Newcastle; 331 cattle, 146 sheep to Antwerp.

Trade is dull in beef, with the market unchanged. Extra sides 8 1/2 to 9 cents, heavy 8 to 8 1/2 cents, good 7 1/2 to 8 cents, light grass and cows 7 to 7 1/2 cents, extra hinds 10 to 10 1/2 cents, hogs 8 1/2 to 9 cents, extra fore 6 1/2 to 6 1/2 cents, heavy 6 1/2 to 6 1/2 cents, good 5 1/2 to 6 cents, light 4 1/2 to 5 cents, backs 6 to 8 cents, ratties 4 1/2 to 5 cents, chucks 5 1/2 to 6 cents, short ribs 9 to 11 cents, rounds 7 to 8 cents, rumps to 10 cents, rumps and loins 9 to 10 cents, loins 10 to 14 cents.

The mutton market is dull, under a very full supply. Veals are also easy. Spring lambs 10 to 10 cents, fall lambs 6 to 8 cents, muttons 6 to 7 cents, veals 7 to 8 cents, fancy and Brightons 8 to 9 cents.

Dispatch from Baker City, Ore., says a great forest fire is raging in North Pine, and fish Creeks, and destruction of a vast amount of timber is threatened.

Schwartz, Dupee & Co. now estimate spring wheat crop about 300,000,000 bushels. Spring and winter, 750,000,000. Corn at least 1,400,000,000 bushels.

Western eggs are coming of better quality, and prices are better on good lots. Cape and nearby fancy bring 23 cents, choice fresh 20 to 21 cents, extra 18 to 19 cents, fair to good 14 to 16 cents, Western selected fresh 14 to 16 cents, and Michigan 14 to 17 cents, with fair to good 11 to 14 cents, and dirties at \$2 to \$3 a case. There is a demand for refrigerator eggs at 16 to 17 cents for April, with some holders bartering to sell at those prices. May packing at 15 to 16 cents and June 14 cents. The stock in cold storage was reduced about 7000 cases last week, and is now 189,094 cases against 144,300 a year ago.

The shipments of leather from Boston for the past week amounted in value to \$130,677; previous week, \$241,485; similar week last year, \$306,065. The total value of exports of leather from this port since Jan. 1 is \$6,564,588, against \$6,202,002 in 1900.

The total shipments of boots and shoes from Boston this week have been 97,371 cases, against 96,000 cases last week and 78,738 cases in the corresponding week last year. The total shipments thus far in 1901 have been 2,995,900 cases, against 2,735,740 cases in 1900.

The reports of the Industrial Commission on the distribution of farm products shows that the cost of hauling farm products over country roads is estimated at \$900,000,000 a year, or more than the entire cost of operating all the railways in the United States, which is placed at \$618,000,000.

0.00. The average haul to the nearest shipping station is twelve miles, and the average cost is twenty-five cents per ton per mile, or \$3 per ton for the 12 miles.

It is said that English sparrows have become such a nuisance in Utah that Salt Lake County has this year paid a bounty of 5 cents per dozen on 42,000 sparrow eggs.

The effort of the California fruit growers to secure a six-day fruit-train service from Sacramento to Chicago, and a nine-day one to New York, has resulted successfully.

The first load of new wheat of the 1901 crop was marketed at Winfield, Kan., June 24. Weight, 62 pounds to the bushel. Kansas hard red winter wheat is now a formidable rival of the justly celebrated northwestern spring.

The imports of dry goods at the port of New York for the week were valued at \$2,022,680, against \$2,200,540 last week, and \$1,507,915 last year. The value marketed was \$2,226,000, against \$2,667,500 last week, and \$1,878,150 last year.

State and County Fairs.

STATE AND GENERAL EXHIBITIONS.
Chicago Live Stock.....Nov. 30-Dec. 7
Illinois, Springfield.....Sept. 10-12
Indiana, Indianapolis.....Sept. 10-12
Iowa, Des Moines.....Aug. 23-31
Maine, Bangor.....Sept. 10-12
Massachusetts Horticulture.....Oct. 1-7
Minnesota, Minneapolis.....Sept. 2-7
Nebraska, Lincoln.....Sept. 2-7
New Hampshire, Concord.....Sept. 2-7
New Jersey Interstate, Trenton.....Sept. 2-7
New York, Syracuse.....Sept. 9-14
South Carolina, Raleigh.....Oct. 21-28
Nova Scotia, Halifax.....Aug. 26-Sept. 7
Oregon, Portland.....Sept. 2-7
Pennsylvania, Philadelphia.....Oct. 1-7
Philadelphia Live Stock.....Oct. 8-12
St. Louis, St. Louis.....Oct. 1-7
Texas International, San Antonio.....Oct. 1-7
Toronto Industrial.....Aug. 26-Sept. 7
Vermont, Rutland.....Sept. 5-7
Vermont, Concord.....Sept. 5-7
Wisconsin, Milwaukee.....Sept. 9-13

MASSACHUSETTS.

Amesbury and Salisbury, Amesbury.....Sept. 24-26
Barnstable, Barnstable.....Aug. 27-29
Berkshire, Pittsfield.....Sept. 10-12
Blackstone Valley, Uxbridge.....Sept. 10, 11
Bristol, Taunton.....Sept. 24-27
Beverly, Beverly.....Sept. 12, 13
Essex, Peabody.....Sept. 17-19
Franklin, Greenfield.....Sept. 18, 19
Hampden East, Palmer.....Sept. 17-18
Hampshire, Northampton.....Sept. 24-26
Hampshire and Franklin, Northampton.....Oct. 3-5
Highland, Middlefield.....Sept. 24, 25
Hillsdale, Cummington.....Sept. 24, 25
Hingham, Hingham.....Sept. 24, 25
Hosack Valley, North Adams.....Sept. 24, 25
Hosack Valley, Great Barrington.....Sept. 25-27
Manufacturers' Agrl, North Attleboro.....Sept. 10-12
Marshallfield, Marshallfield.....Sept. 17, 18
Martha's Vineyard, West Tisbury.....Sept. 12-14
Middlesex South, Framingham.....Sept. 17, 18
Nantucket, Nantucket.....Aug. 28, 29
Oxford, Oxford.....Sept. 5, 6
Plymouth, Bridgewater.....Sept. 11-16
Spencer, Spencer.....Sept. 18, 19
Union, Randolph.....Sept. 11-13
Weymouth, South Weymouth.....Sept. 28-29
Worcester, Worcester.....Sept. 3-5
Worcester East, Clinton.....Sept. 17-19
Worcester Northwest, Athol.....Sept. 2-3
Worcester South, Sturbridge.....Sept. 12, 13
Worcester West, Barre.....Sept. 28, 29

MAINE.

Androscoggin, Livermore Falls.....Aug. 27-29
Arrostoch, Houlton.....Sept. 4-6
Arrostoch, Bangor.....Sept. 10-12
Bristol, Bristol Mills.....Sept. 24-26
Cumberland Farmers', West Cumberland.....Sept. 24, 25
Cumberland, Gorham.....Sept. 17-19
Cumberland, Northern, Harrison.....Sept. 17-19
Durham, Durham.....Sept. 25, 26
Eastern, Bangor.....Aug. 27-29
Franklin, North Phillips.....Sept. 10-12
Gray Park, Gray Corner.....Aug. 27-29
Kennebec, Kennebec.....Sept. 24-26
Kennebec, South, South Windham.....Sept. 17-19
Lake View Park, East Sebago.....Sept. 10-12
Lincoln, Bangor.....Oct. 1-3
Madawaska, Madawaska.....Oct. 1-3
New Gloucester, Upper Gloucester.....Sept. 18-19
Osgood Valley, Cornish.....Aug. 20-22
Oxford, South Paris.....Sept. 17-19
Oxford West, Fryeburg.....Sept. 24-26
Penobscot, Bangor.....Sept. 11-13
Pittston, East Pittston.....Sept. 10-12
Richmond Farmers', Richmond Corner.....Sept. 24-26
Sagadahoc, Topsham.....Oct. 4-11
Shapleigh, Acton.....Oct. 8-10
Somerset Central, Skowhegan.....Sept. 10-11
Waldo, Waldo.....Sept. 3-5
Waldo-Penobscot, Monroe.....Sept. 10-12
Washington, Pembroke.....Sept. 17-19

CONNECTICUT.	
New London County, Norwich.....	Sept. 17-19
Windham County, Brooklyn.....	Sept. 10-12
Beacon Valley, Naugatuck.....	Sept. 1, 2
Berlin, Berlin.....	Sept. 18
Cheshire, Cheshire.....	Sept. 18-20
Chester, Chester.....	Sept. 11-12
Clinton, Clinton.....	Oct. 2
Danbury, Danbury.....	Oct. 7-12
East Granby, East Granby.....	Oct. 7-12
Farmington Valley, Collinsville.....	Oct. 7-12
Granby, Granby.....	Sept. 25-26
Guilford, Guilford.....	Sept. 25
Harwinton, Harwinton.....	Sept. 24
Meriden, Meriden.....	Oct. 7-12

MASSACHUSETTS PLOUGHMAN

BOSTON, MASS., AUGUST 31, 1901.

The bill against the mosquito is rapidly mounting up.

Practice seems to make Crescens perfect in the manufacture of new records.

The Nantasket shoals lightship can now keep on speaking terms with the rest of the country.

The Revere authorities have done a little Sunday gunning and bagged the autonomous swans.

A woman in Maine is attacking fire water with fire, possibly on the theory that like kills like.

Mrs. Nation took a dip at Atlantic City, and one naturally wonders if the hatchet and the dipper went in together.

Five new public schools in town are to have bathrooms. In a good republic cleanliness should be next to the ballot box.

Nietown, Pa., is well named if we may judge by the fact that it requires the watchful eye of only one policeman in fourteen miles.

A local paper seems to have just discovered that the Back Bay is deserted in summer, and conceives the story to be worth half a column.

It is said that the bacillus of epilepsy has been discovered. Hereafter whoever intends to give another person fits will have to provide himself with the germ.

While we are pleased to help on the general chorus that greets Sir Thomas, we hope that the gentleman has studied American popularity, and will not be unduly puffed up.

Has Sherlock Holmes come to life again? It would not be impossible when we remember the ability of our old friend Sleuth, for example, to survive the most convincingly fatal catastrophes.

The American Federation of Labor is turning its attention to a more strict exclusion of the heathen Chinese. Does the exclusion policy include Professors Hwang and Tsai of the College of Kinkau?

"Why could not man have come from the lizard?" asks an eleven-year-old boy in Omaha. And yet the Western papers continue to publish imaginary juvenile conversations dated from Boston.

What with the third rail and the noise it is very evident that there are still a number of opportunities for inventors to improve the means of rapid transit. We go expeditiously, but not altogether happily.

St. Louis begins preparations for its great fair by abolishing a smoke nuisance. If world's fairs had no other result than a growing appreciation of civic beauty they would be worth all they cost.

The civilized world—even the most civilized part of it—has smiled pleasantly at the thought of France at war with Turkey. The Old Man of the East has long ago used up the average citizen's stock of sympathy.

When the Shamrock II. arrived the band played the "Wearing of the Green" and "God Save the King," a combination of sentiments that shows the value of sport as an ameliorator of social conditions.

The census reports that Americans live on an average four years longer than they used to. Is this because we have got used to the pressure of our own kind of life, or is it because we are learning to regulate the pressure?

Fate scores another point in the case of the East Boston man who slipped on the ice in the midst of the dog days, and the incident is worthy of the Arabian nights. The accident must have been written in his horoscope.

It would be a pleasant bit of courtesy if the newspapers would stand in with the Government, and refrain from printing the various Schenck-Sampson interviews which the Government frankly desires to keep out of print.

President Harper of the Chicago University has been decorated with the French Order of the Legion of Honor. This will probably prevent Professor Triggs from declaring that the Legion of Honor is less distinguished than the Y. M. C. A.

It is unfortunately characteristic of the free-born American that he or she should insist in advance to the presence of a colored guest in an English hotel, and equally to the credit of the hotel proprietor that he paid no attention to the objection.

The English athletes have landed, and they will be given a good time and a hard battle if we know anything of the value of a Yale and Harvard combination for upholding the hospitality and athletic honors of the American undergraduate.

The colonial policy continues to be made interesting by the dignity of some of its opponents. Were all of the opposition as dignified as is an important part of it, it is hard to say whether there would now have been any colonial policy left.

How far the soapstone bathtub is a preventive of crime is yet to be determined. That cleanliness is next to godliness is not the inspired statement that it is often held to be; nevertheless, Wesley was a good observer, and the comparatively scrubbed present is unquestionably better than the unwashed middle ages.

Despite the number of organizations already in existence for the amelioration of this or that, there is always room for another. For example, there are enough Bostonians who shudder at the so-called Lady of the Mist in the Public Garden to start a society for the purpose of removing her, cracked head, yellow rust, and all,—to the kindly oblivion of very cold storage.

We are pleased to notice that in the case of the latest fire due to the use of tobacco the cigar and the pipe have figured. The cigarette has almost come to figure in this connection as generally as the word runs for all intents and purposes in the vocabulary of many reformers. If the carelessness of the smoker were also emphasized the responsibility in the case would be fairly distributed.

The United States is again arrayed—perhaps better, disarrayed—against Spain. The question is shall the Princess Enlala, for the mere fancy of the thing, take unto herself certain gowns already ordered by an American lady—even if the Paris dress-maker promises to outdo himself in making the substitutes. The question, however, is hardly likely to become of national importance.

Mr. Godkin considers that the best contribution which modern England has made to civilization is the English gentleman, a combination of education, cultivation, good manners, and good clothes. An editorial mention of the statement declares that family, rank, and wealth are to be presumed. The presumption is unnecessary. The essentials have been obtained by many a man who had nothing but his own ambition and hard work to depend upon.

There have been some people with a strong prejudice against traveling in subways and underground tunnels, but more especially those which run under arms of the sea or the channels of rivers. But the discovery a short time ago that a dozen or so of iron rods on the great suspension bridge across the East River had broken, allowing one side of it to settle three or four inches, has led many to think that a tunnel would be preferable to a bridge. Lacking the tunnel from New York to Brooklyn they have largely increased the amount of travel on the ferry boats, though many of those who have changed say they do it for the sake of the cool breeze on the boats. Some of those who make the trip across the Atlantic by steamer would be glad to engage a passage back by subway tunnel, if there was one, when they landed.

The two men who have died from yellow fever, after allowing themselves to be bitten by mosquitoes that had previously killed themselves with blood from a patient with that disease, may be considered martyrs to science or the cause of humanity, but they have proven what most of us believed before, that the mosquito has the power to convey fever infection, and we may take it as granted that it can convey malaria, typhoid and other fevers, and perhaps many other diseases as well. If so, it would readily account for the ceasing of such diseases to spread after a sharp frost comes, as was said years ago of the yellow fever when it prevailed in some of our Southern cities. We regret that this knowledge could not have been obtained without the sacrifice of human lives. Now, do we need to go farther in the effort to demonstrate that the flies, the bedbugs, and even the little fleas, or any that suck blood, can inoculate with any disease germs that may be in the blood? We think it better to declare war against all of them on suspicion, without waiting for positive proof.

An exchange gives a method of sweetening the air in cellars, a part of which we have given before, but this is the most thorough we have seen, and we advise its trial before winter comes. Clean, sweep and dust, moving everything movable, then open doors and windows and put unskated lime in an earthen dish and scatter copperas over it, allowing it to air slake. This will drive out bad air and odors. Then scatter dry powdered borax in corners and along the walls, after which place nets or bags with lumps of fresh charcoal in them where they will not be in the way. This should be taken down once a week and heated until dry, which will restore its power of absorbing all odors. If the cellar is damp, pads filled with powdered slaked lime, plaster and pulverized charcoal hung against the wall will absorb both dampness and odor. We think this would be thorough, but would not care to have the fumes of slaking lime and copperas to fill living rooms or bedrooms or to have the charcoal dried by the kitchen stove while the other process was going on.

So much was said and written some years ago against grazing of the aftermath on mowing lands, that many now think the fields would cease to be fertile if the cattle were turned upon them for a few hours, yet if the grass seemed heavy enough to be profitable, they would put on the mowing machine and cut much nearer to the ground than the cattle would gnaw. There is a reasonable limit to all things. We would not cut a mowing field as closely as we could if we thought a dry and hot spell had begun, unless we felt sure there was enough of moisture and fertility in the soil to start it again before the heat had burned down to the roots. Nor would we graze it closely; but if there were spots in it scarcely large enough to pay for the mowing, but more than we cared to leave on the field, we would let the stock on them, confident that they would seek those places first and trim them down, while we would watch to prevent too close grazing. But there is danger in leaving so much aftermath on the field as to smother the roots like a blanket, or as to hold the ice or frozen snow among it to winterkill it.

The reported shooting of natives taken prisoners by the Boers when they are with the English army is as unjustifiable as was the massacre of negro soldiers when taken prisoners by the Confederate army at Port Mifflin or elsewhere. The Boers have even been the oppressors of the Kafirs. When not able to hold them in absolute slavery, they have held them so terrorized that they have been obliged to work for barely subsistence wages, and have beaten them as cruelly as if they had possessed the power of life and death over them. Even Olive Schreiner, apologist for the Boers as she now is, in her earlier writings portrayed the condition of the Kafirs in Boer employ in but little more favorable light than Mrs. Stowe painted the condition of the slaves under the rule of Legree. Yet all Southerners were not Legrees. There were Shelys and Le Clairs among them, but neither Mrs. Schreiner nor any other writer before the breaking out of the war has given a glimpse of any Boer family in which even common humanity was shown to the Kafirs who served them. Who can wonder if they take sides with the English?

The short crop of corn, even if it shall be as poor as some of the estimates which we have seen, but which we do not implicitly believe, will not deprive us of food for man or beast, or greatly lessen the value of our agricultural exports. Nearly all reports that we see from the wheat-growing sections report that crop as heavy, and secured in good condition. Whitman County, Washington, is reported by the Post-Intelligencer of Seattle as expected to produce ten million bushels, exceeding early estimates by fifteen to twenty per cent. One man has threshed 1500 bushels from thirty acres, and another 1600 bushels from forty acres, and not finished yet. As the estimated acreage in the county is 400,000 acres in wheat, it would require but twenty-five bushels per acre to get the 10,000,000 bushels. Last year the average was 23½ bushels, and this year all claim a heavier crop. The total yield of wheat in Washington last year was reported as 25,000,000 bushels, and an increase of twenty per cent. would bring it about 30,000,000 bushels. Last year California had more than twice as much area in wheat as Washington, and produced 28,543,828 bushels, and Oregon had more acres but produced only 16,198,013 bushels. Washington wheat takes as high a rank as any produced in the country for milling purposes.

Dr. C. D. Smead, in the National Stockman, suggests that the problem of "hired help" upon the farm may be solved by the employment of Chinese labor, and especially upon dairy farms. He says the Chinaman is never lazy, works early and late, and does his work willingly. His habits of close intimacy would lead him to copy the faults as well as the good habits of his teachers, as has been illustrated by the story of the lady who taught one to make cake. The first egg she broke was not good and she threw it away. After that John made good cake, but he never failed to throw away the first egg he broke. But in California, where the first outcry against the Chinese was raised by Dennis Kearney on the "sand lots," they have now found the Chinese good help in both fruit orchards and gardens, always reliable, and when they chose to rent a farm they were good tenants, paying rent promptly, growing good produce if they could do so by extra care, and never trying to out-price or undersell others in the business. Having absorbed and Americanized a few million Irish and Italians, we might try the Chinese, who are not much worse heathens than our Puritan ancestors thought the Catholics were. Dr. Smead in his statement disclaims any personal interest by saying that he has a hired man who has been with him nearly twelve years and a girl who has worked in the house over eight years. In this section hired help so long in one place would be bossing the whole business "if not sooner killed."

Concerning Dramatic Criticism. The public is certainly to be congratulated upon and ought distinctly to be benefited by the series of articles on dramatic criticism which have just been begun in the Atlantic Monthly by Boston's most able critic, Mr. Henry Austin Clapp. Mr. Clapp is a man of broad culture and of sound judgment in matters dramatic, as well as a gentleman in whom kindness and the judicial quality are so nicely mixed that his criticism never drops to abuse on the one hand nor soars to gross flattery on the other. In a word, Mr. Clapp has standards, and though there be some who think these to be too high, not a few others endorse them with all their heart and soul daily that other critics may catch a hint of their nobility.

Mr. Clapp is of the opinion that a nation which is producing no readable dramatic literature is producing no dramas of permanent importance from the points of view of art and life. Here is indeed an astounding statement according to the notions of the general public and of the prophet, the sensational critic!

To make the play the thing were as far as possible from the intention of these. The set, the costumes, the actors, the people in the audience—all are of much greater importance than the drama that occasions them. That is merely a trifling view, intended to be adorned, like the cheap cart of the coaching parade, with such an imposing array of tinsel and flowers and pretty girls in pretty gowns that all the spectators shall be fascinated by the sight, and go away with their senses wrapped in an enfeeblement of what they term "beauty."

A girl with a sweet Madonna-like face clothed only in a simple white frock would be condemned if not ignored by this reporter. Chiffons, plumed hats and gorgeous gowns are what he has been instructed to note and describe, and the simple, the chaste, the artistically true in the drama appeals just about as little to the ordinary sensational critic as the natural resources of the Dominion. It is little short of a scandal that English capitalists have invested so little, comparatively, in the business growth of the country.

If there is to be war over the annexation of Canada it will be commercial in kind. England has practically capitulated, so far as Canada is concerned, as recent futile parleys have shown. The situation, therefore, wants nothing but better trade relations with this country to perfect conquest, and these will come as soon as the boundary question is settled. And it is highly probable that this will be settled as soon as Canada can dispense with the advantage of Great Britain's military and naval protection. She will arrive at this conclusion when she discovers that she has more to gain from the United States, commercially, than from England. And that time is not very distant.

Annexation, however, has not as yet become a political issue; consequently people are not worked up about it sufficiently to study it. Imperial courts of appeal, with representation in the Parliament of London (Mr. Chamberlain's scheme for closer connections between Canada and England), have met with little favor from the Canadian ministers or from the practical politicians who have the ear of the people. The consequence of this will be political agitation in favor of annexation. Votes will do the rest.

English immigrants are naturally strong in the faith that English rule is inevitable. Those born of English immigrants share this view. But the mass of the people, the French and the pure Canadians, are not so boisterously dogmatic.

Recent events quite independently show that the strength of this sentiment of love for England is not as strong as it was.

I found quite a strong feeling against annexation on the ground that Canadians would be thus "losing their independence." So little is the genius of republicanism understood! Where is the loss, if the choice be free and the outcome of development?

It has yet to be proved, of course, whether our Constitution is elastic enough to suit all people; but it would surely suit a people so near us in racial constitution and in social sympathy as the Canadians.

I heard much criticism of the Government of the United States on the ground of its corruption.

It is quite easy to see that a spotless people would not voluntarily unite with a corrupt people; but Canada is not populated by such a people, and I fear this corruption argument is a case of the pot calling the kettle black.

It was not easy, but it was always possible, to remove much of the weight of these objections; *tu quoque* generally sufficed as a reply.

For no government is perfect. Instead of weakening the movement in favor of annexation, the corruption of American politics can always be shown to be an argument in its favor, for we need the sturdy and more rugged spirit of our northern neighbors—a little more of the frigid zone in the torrid heat of our political debates would help us mightily.

On the whole, therefore, further investigation sustains Prof. Goldwin Smith's political teaching, and annexation seems but a question of time. It behooves both parties, Canadian and American, to study the issue, especially to understand each other, and to wait for the auspicious moment when the first step toward the federation of our race shall be clearly, broadly and intelligently taken.—Henry Davies, Yale University, New Haven, Ct., in New York Journal.

The Apple Business.

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Professor Robertson, commissioner of agriculture for the Dominion of Canada, said people went into apple culture under the impression that they could grow them by intuition. They grew too many varieties. His view was that not more than a dozen varieties of apples for export should be grown in a district of say 150 miles square. A fifty-barrel lot of one variety would average to sell in England for five shillings (1.25) a barrel more than if it consisted of five varieties.

Men, ordinarily honest, but without any training, went into an orchard and packed apples, and, as a result, dealers in Liverpool thought there was a lot of rogues in Canada. The pork business had increased twenty fold in ten years because the packing was done by skilled men under the best scientific conditions, and that was the thing needed in the apple trade. The average export now from Canada is about \$1,000,000 a year.

The two great commercial commandments were: 1. Thou shalt deliver goods as they are represented to be; 2. Thou shalt deliver goods in the best possible condition. He showed that this was not now done in Canada. He had seen apples in Liverpool marked "xxxx 100," and yet the middle of the barrel proved to be the scabbiest lot he ever saw.

He did not like shipments on consignment. The commission man in England was the best in the world for England, for he could return less to the consignor and make more charges and commission for himself than any other man, but if he had the right kind of goods put up in the right shape he had the best consuming market in the world behind him. Apples should not be sent on consignment if they could be sold on the wharf in Montreal. This is what is done with butter and cheese, not two boxes of cheese in a hundred being consigned.

A party who received butter sent in cold storage from Ontario to Liverpool let it remain 48 hours in the heat on the dock, thus losing in quality and selling lower than it should. A lot bought outright by the dealer was in cold storage there in two hours after it left cold storage on the steamer.

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He defended the "fruit marks" act of last session, which compels the grower to put his name and address on each package and provided a penalty for marking apples "finest," "best" or "extra" unless the quality of the fruit warranted it. It also made it fraudulent if the apples at the ends were superior to those in the middle. He told of a farmer in the Annapolis Valley whose rule was to discharge any man who packed a small apple in a barrel. As a result for four years his apples netted an average of \$3.51 a barrel in the orchard.

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The Horse.

Grand Circuit Meeting at Readville.

The sixth meeting in the Grand Circuit chain opened at Readville Trotting Park on Monday, Aug. 19. It was a big first day crowd that welcomed the sulky stars to New England. The programme was not a particularly promising one, in spite of the fact that the Blue Hill stake for 2.30 trotters for a purse of \$5000 was on the card, and the entertainment was only ordinary.

Three of the four events went off in straight heats; the other, the 2.25 trot, was split up, and proved the most interesting contest of the afternoon. The track was far from good, as it was soft and cuppy and fast time was out of the question.

The programme led off with the 2.13 pace, a two-in-three event. W. H. Moody was the favorite, but was unable to make good. Don Riley stepped off in front the opening heat and showed the way past the half, where Junero came along, and out-stepping Riley on the upper turn came to the front at the head of the stretch and won easily. Paige stepped up with the favorite W. H. Moody in the stretch and beat Don Riley for the place.

Lyle Sterling cut Special Boy loose in the second heat, and Junero, Moody and he stepped heads apart to the half, where Moody dropped back and the other two had it out in front to the stretch, but Special Boy went to a break and Junero had another easy win of it. Both heats were in 2.10's, a cut of nearly two seconds from her previous record.

Country Jay landed in a soft spot in the Blue Hill stake for 2.30 trotters for a purse of \$5000, and he won it off hand with little opposition. It was a cheap race for so valuable a prize. The Jay stepped out in front from the word, and for two heats wasn't headed, in fact, nothing got to him, though Kozy chased him out in 2.11's.

It looked for a little in the third heat as though it would prove a contest after all, for both Poindexter and George Smith headed him from the quarter to the third furlong pole, but the Jay moved out from them after passing the half, and raced a clear length in front of his nearest competitor up to the wire.

Iva Dee looked dangerous rounding the upper turn, as she was stepping fast, but she went to a break, but at that rallied in the stretch and got the place.

It was a small field that faced the starter in the 2.16 pace, another two-in-three event, but the finishes of the two heats stirred the spectators to enthusiasm.

The first heat, Agnes Le May and Shorty came lapped to the stretch. Both were under a stiff drive through the last quarter, and the issue was doubtful up to the last strides, where Shorty let out a link and nipped the heat by a head.

Ellie snatched the pole going off the second heat, but Reynolds saw that he didn't get out of Shorty's reach. Shorty stepped up to his saddle girth passing the half, and clung there to the stretch, and in another hard finish Shorty outfooted Ellie in the last twenty yards and won again by a short neck.

The 2.25 trot was the best event of the day, and it wasn't finished, as rain came on at the end of the fourth heat, and the race had to be carried over.

Alberta D. was the favorite for the event. Mollery laid the favorite up the first heat, and Lauretta, Marique and Nanita had a fight for it out in front. They came lapped through the stretch, and were only heads apart at the wire, but Marique got the verdict in 2.16's.

Garth was out for the second heat with Bingen Jr. He had twelfth position going away, but he stepped around his field and took the pole after passing the quarter. Easter came along, and racing at his throat-latch into the stretch, the two had a head-and-head finish of it, both under a driver, with the verdict in favor of Bingen Jr., who cut his record to 2.14's.

Alberta D. was well up at the head of the stretch, but went to a break and fell back. Bingen Jr. and Easter raced out in front of the field to the stretch, the third heat, but Alberta D. was steady and a close third, and when Mollery pulled him out, he came through and won handily by an open length from Bingen Jr.

The fourth heat was an easy victory for Alberta D., Easter and Marique chasing him out. Bingen Jr. went to a bad break early in the mile and Garth laid him up. The race had to be postponed at this stage of it.

SUMMARIES.

Readville, Mass., Aug. 19, 1901—2.13 pace, 2 in 3. Purse, \$1000.
Junero, blk m, by Allerton; dam, Kathrina, by Alyone (A. McDonald).....1 1
W. H. Moody, ch h, by Evallie (Parker).....2 2
Belle Cannon, b m, by Cannon Ball (Biggs).....3 3
Don Riley, b g, by Candel Wilkes (Hudson).....4 4
Special Boy, ch g, by Isidore (Parker).....5 5
Beauty Spot, b m, by Gazette (Shockey).....6 6
Hyle T, b m, by Cantalero (Paige).....7 7
Cuba, b m, by Red Hat (Freeman).....8 8
Time, 2.10, 2.12, 2.14.

Same day—The Blue Hill 2.30 trot. Purse, \$5000.
Country Jay, ch g, by Jayhawker; dam by Parkville (Macey).....1 1
Poindexter, br h, by Abbottsford (Gatcomb).....2 2
Kozy, b m, by John G. Carlisle (A. McDonald).....3 3
Iva Dee, b g, by St. Vincent (Weigle).....4 4
George Smith, b g, by St. Vincent (Weigle).....5 5
Sonata, b m, by Red Chute (Shank).....6 6
Miss McDonald, blk m, by Bermuda (Middleton).....7 7
The King, b g, by Clay King (Marsh).....8 8
Time, 2.11, 2.12, 2.13.

Same day—2.16 pace, two in three. Purse, \$1000.
Shorty, ch g, by Sortie; dam, Michigan Belle, by Puzzle (Reynolds).....1 1
Ellie, b g, by Raven (Garth).....2 2
The Judge, b g, by Belina (A. McDonald).....3 3
Frank Yokum, b g, by Parker (Seaton).....4 4
Agnes LeMay, b m, by Ashland Wilkes (Hutchings).....5 5
Midget, blk m, by Cronwellian (Bryant).....6 6
Time, 2.12, 2.14.

Same day—To beat 2.30 trotting.
Miss Wicker, b m, by Potential; dam by Wilkes Spirit Jr. (Rice).....2.25
Readville, Mass., Aug. 20, 1901—2.25 trot. Purse, \$1000. Four heats trotted Aug. 19.
Alberta D., b g, by Shenango; dam, Hollis Mare, by Col. Morrill (McHenry).....1 1
Marique, ch h, by Expedition (Kenney).....2 2
Bingen Jr., b g, by Bingen (Proctor).....3 3
Easter, b m, by Salvi (Golden).....4 4
Lauretta, ch m, by Norris (Middleton).....5 5
John Hooper, ch g, by L. H. Bristol.....6 6
Sonata, b m, by Red Chute (Shank).....7 7
Capt. Huff, br g, by Arion (Humphreys).....8 8
Senator Mills, b c, by Electre (Gallagher).....9 9
Vanilla, b m, by by Baronet (Paige).....10 10
Baroness, ch m, by Baronet (Paige).....11 11
Lena, b m, by Mendocino (McQuig).....12 12
Time, 2.14, 2.15, 2.16, 2.17, 2.18.

Same day—2.34 pace. Purse, \$500.
Audubon Boy, ch g, by J. J. Audubon; dam, Flaxie, by Bourbon Wilkes (Hudson).....1 1
Shadow Chimes, br h, by Chimes (Geers).....2 2
Cinch, ch g, by Alcantara (Blanchard).....3 3
Daisy Queen, blk m, by Peeler (Mudson).....4 4
Louise G., b m, by Alcantara (Merrell).....5 5
Star Fugh, ch g, by Tom Fugh (Lopez).....6 6
Rajah, b g, by Charles Derby (Welch).....7 7
New Richmond, br h, by Brown Hal (Benedict and McHenry).....8 8
Amber Sphinx, b m, by Sphinx (Dore).....9 9
Time, 2.18, 2.19, 2.20.

WINNERS ON NEW ENGLAND TRACKS.
No. 1—LACONDA, pacer (4) (2.15), winner at Dover. Sire, Allerton (2.04); dam by Alyone (2.27). No. 2—FANNY RICE, trotter (2.14), winner at Saugus. Sire, Galeotti; dam, Edith H. (2.10), by Deucalion (2.22). No. 3—RUSSELL D., pacer (2.16), winner at Worcester. Sire, Will Mason; dam, Galatea (2.24). No. 4—GENE D., trotter (2.16), winner at Saugus. Sire, Johnny Wilkes (2.17); dam, by Kohanoor, son of Volunteer.

Go See, b g, by Nuthurst (Proctor).....11 11 10 dis
Helios, blk m, by Emory Wilkes (McCartney).....12 12 11 dr
Terrace Queen, br m, by Valpeau (Shaffer).....6 3 3
Time, 2.08, 2.11, 2.10, 2.04, 2.04.
Same day—2.10 trot, 2 in 3. Purse, \$1500.
Toggles, br g, by Strathway; dam, Fly, by Pasha (Clark).....1 1
Little Dick, b g, by Harry Hummer (Pope).....2 2
Temple Wilkes, b g, by Kentucky Wilkes (Golden).....3 3
Sister Alice, b m, by William Wilkes (Kenney).....4 4
Janice, b m, by William Harold (Sanders).....5 5
Time, 2.12, 2.11.
Same day—Foals of 1898, trotting, 2 in 3. Purse, \$2000.
Admiral Dewey, b c, by Bingen; dam, Nancy Hank, by Happy Medium (Titer).....1 1
Charles D., b m, by Lynne Bel (Thayer).....2 2
Rowellau, br g, by Adbell (Golden).....3 3
Melton, b c, by Allerton (Young).....4 4
Nelly Boos, gr f, by Clay King (Carpenter).....5 5
Say Tell, b c, by Axtell (Pierce).....6 6
Hawthorn, rf f, by Jay Bird (Hudson).....7 7
Borlana's Brother, b c, by Boreal (Ryan).....8 8
Time, 2.12, 2.14.

Readville, Mass., Aug. 21, 1901—2.19 trot. Purse, \$1000. Four heats trotted Aug. 21.
Leola, br m, by C. F. Clay; dam, Lady Pepper, by Onward (Kilbourn).....14 2 1 1
Sallie Simpson, b m, by J. C. Simpson (Middleton).....1 1 2 3 2
Vic Scudder, br g, by Hambleton (Young).....6 4 3 3 7
Henrietta, blk m, by Idol Gift (Young).....6 4 3 3 7
L. B., ch g, by Particus (Hudson).....15 4 10 7
Easter, b m, by Mansfield Medium (Kilbourn).....11 6 7 4 7
Robert, b m, by Boreal (Ryan).....11 8 14 13 5
Limerick, b g, by Prodigal (McCartney).....2 7 12 6 6
Sphinx Lassie, b m, by Sphinx (Turner).....8 3 5 4 dr
Charles D. Jacobs, ch g, by Egmont (Kenney).....4 9 8 12 dr
Ben Hall, b g, by Ben L. (H. T. T.).....5 7 8 dr
Debut, b h, by Dictator (McHenry).....12 11 9 dr
Onesonta, ch m, by Red Heart (McDonald).....6 10 11 9 dr
Mary C., b m, by Warren C. (Johnson).....9 12 15 dr
The Spaniard, b g, by Realist (McDonald).....13 14 13 dr
Time, 2.12, 1.16, 2.15, 2.12, 2.14, 2.17.

Same day—2.05 pace. Purse, \$1500.
Royal R. Sheldon, blk g, by Constantine; dam, Flaxie, by Bourbon Wilkes (J. O'Neill).....1 1
Edith W., b m, by Ben Leonard Jr. (Turner).....2 2
The Maid, b m, by Hal Index (Garth).....3 3
Bonnie Direct, blk h, by Direct (McHenry).....4 4
Hal R., b h, by Hal Dillard (Snow).....5 5
Time, 2.07, 2.08, 2.09, 2.10, 2.11.

Same day—2.14 trot, 2 in 3. Purse, \$1500.
Susie J., rf m, by Jayhawker; dam, Millonaire, by Norwood (McKee).....8 1 1
Miss Whitcomb, b m, by Edgemont (A. H. Donald).....1 1 3 13
Alkalone, blk h, by Wilton (Dore).....2 4 2
Glory, ch g, by Sir Walter Jr. (Paige).....4 2 3
Eula Mc, b m, by McKinney (Sanders).....3 10 12
Capt. Bracken, b g, by Earl Battle (Ervin).....7 9 4
Coxey, b g, by Judge Cox (Spear).....6 5 9
Bird Eye, ch h, by Prince Belmont (Higgs).....5 7 7
Prince of India, br h, by Baron Wilkes (Lyons).....13 12 5
May C., b m, by Superior (James).....11 8 6
Listerine, b m, by Atholton (Clark).....9 6 10
Axtell, b g, by Axtell (Marsh).....10 8 8
Hunter Hill, b g, by Sam Hill (Humphreys).....12 13 11
Lita W., br m, by George Simmons (Hutchings).....14 14 14
Ebba, gr m, by Red Wilkes (Winings).....14 14 14
Time, 2.12, 2.13, 2.15.

Readville, Mass., Aug. 22, 1901—2.25 pace. Purse, \$1000. Two heats paced Aug. 21.
Frazier, ch g, by Sphinx (McHenry).....1 1 1

The Grazer, b g, unknown (Lyons).....4 5 2
Tommy Mc, b g, by Jersey Wilkes (McCartney).....7 5 5
Reed Patchen, rf g, by Bourbon Patchen (Hyde).....5 2 7
Darnette, blk m, by King Nutwood (Carpenter).....3 4 4
Dandy C., gr g, by Andalusian (Garrison).....6 3 3
St. Patrick, ch g, by Grey Stone (McVey).....7 4 6
Fred H., b g, by Rebeck (Noble).....dis
Time, 2.12, 2.14, 2.11.
Same day—2.14 pace. Purse, \$3000.
Dan Patch, rf h, by Joe Patchen; dam, Zeile, by Wilkesberry (McHenry).....1 1 1
Council Chimes, blk h, by Chimes (Snow).....5 2 2
Laconia, br h, by Allerton (Strobbins).....2 5 2
Jack Harding, b h, by Wilkesmont (Sayles).....3 3 3
Armored, gr m, by Don Pizarro (McDonald).....4 4 4
Time, 2.07, 2.08, 2.10.

Same day—To beat 2.30 trotting.
Kraakur, br h, by Kremling; dam, Mayflower, by Sweepstakes (Young).....won
Time, 2.26.
Same day—To beat 2.20 pacing.
Samaritana, b m, b m, by Mercury; dam, Maritana, by Masker (Miller).....won
Time, 2.10.

Same day—2.12 trot, two in three. Purse, \$1500.
Allright, b g, by Enright; dam, untraced (Hyde).....6 1 1
Dolly Bidwell, blk m, by Ingleswood (Carpenter).....1 3 3
Neva Simmons, b m, by Simmons (Price and Geers).....2 2 2
Confessor, ch g, by Constantine (Bowen).....4 2 2
Time, 2.07, 2.08, 2.10.

Same day—Exhibition mile.
Todd, br c (2), by Bingen; dam, Fanella, by Arion (Carpenter).....Time, 2.21.
Same day—2.07 pace. Purse, \$1500.
Riley B., blk h, by Happy Riley; dam, Belle B., by Johnny Harris (Ervin).....2 1 1 1
Major Muscovite, b h, by Muscovite (McMaben).....1 4 5 6
Art Alon, b g, by Alonzo (Dore).....3 3 3 3
Mazette, b m, by Tennessee Wilkes (McDonald).....6 2 2 2
Eylet, gr m, by Gansetta Wilkes (Kenney).....4 5 4 4
Joe Pilot, b g, by Delinctor (Kilbourn).....5 6 4 5
Time, 2.01, 2.07, 2.08, 2.10.

Same day—2.12 trot, two in three. Purse, \$1500.
Allright, b g, by Enright; dam, untraced (Hyde).....6 1 1
Dolly Bidwell, blk m, by Ingleswood (Carpenter).....1 3 3
Neva Simmons, b m, by Simmons (Price and Geers).....2 2 2
Confessor, ch g, by Constantine (Bowen).....4 2 2
Time, 2.07, 2.08, 2.10.

Same day—2.14 trot, 2 in 3. Purse, \$1500.
Susie J., rf m, by Jayhawker; dam, Millonaire, by Norwood (McKee).....8 1 1
Miss Whitcomb, b m, by Edgemont (A. H. Donald).....1 1 3 13
Alkalone, blk h, by Wilton (Dore).....2 4 2
Glory, ch g, by Sir Walter Jr. (Paige).....4 2 3
Eula Mc, b m, by McKinney (Sanders).....3 10 12
Capt. Bracken, b g, by Earl Battle (Ervin).....7 9 4
Coxey, b g, by Judge Cox (Spear).....6 5 9
Bird Eye, ch h, by Prince Belmont (Higgs).....5 7 7
Prince of India, br h, by Baron Wilkes (Lyons).....13 12 5
May C., b m, by Superior (James).....11 8 6
Listerine, b m, by Atholton (Clark).....9 6 10
Axtell, b g, by Axtell (Marsh).....10 8 8
Hunter Hill, b g, by Sam Hill (Humphreys).....12 13 11
Lita W., br m, by George Simmons (Hutchings).....14 14 14
Ebba, gr m, by Red Wilkes (Winings).....14 14 14
Time, 2.12, 2.13, 2.15.

Readville, Mass., Aug. 22, 1901—2.25 pace. Purse, \$1000. Two heats paced Aug. 21.
Frazier, ch g, by Sphinx (McHenry).....1 1 1

Palmleaf, b g, by Onward (McCarthy).....7 6 5
Phoebe Onward, b m, by Shadefield (Gardner).....7 5 5
Senator L., b g, by West Cloud (Golden).....5 7 dr
Sue, b m, by Abdon (Clark).....dis
Time, 2.10, 2.04, 2.11.
Same day—Free-for-all, 2 in 3. Purse, \$2500.
Crescens, ch g, by Robert McGregor; dam, Mabel, by Mambino Howard (Ketcham).....1 1
Lord Derby, b g, by Mambino King (Geers).....2 2
Charley Herr, b h, by Alfred G. (Cahill).....dis
Time, 2.07, 2.08.

Same day—Exhibition mile.
Todd, br c (2), by Bingen; dam, Fanella, by Arion (Carpenter).....Time, 2.21.
Same day—2.07 pace. Purse, \$1500.
Riley B., blk h, by Happy Riley; dam, Belle B., by Johnny Harris (Ervin).....2 1 1 1
Major Muscovite, b h, by Muscovite (McMaben).....1 4 5 6
Art Alon, b g, by Alonzo (Dore).....3 3 3 3
Mazette, b m, by Tennessee Wilkes (McDonald).....6 2 2 2
Eylet, gr m, by Gansetta Wilkes (Kenney).....4 5 4 4
Joe Pilot, b g, by Delinctor (Kilbourn).....5 6 4 5
Time, 2.01, 2.07, 2.08, 2.10.

Same day—2.12 trot, two in three. Purse, \$1500.
Allright, b g, by Enright; dam, untraced (Hyde).....6 1 1
Dolly Bidwell, blk m, by Ingleswood (Carpenter).....1 3 3
Neva Simmons, b m, by Simmons (Price and Geers).....2 2 2
Confessor, ch g, by Constantine (Bowen).....4 2 2
Time, 2.07, 2.08, 2.10.

Same day—Exhibition mile.
Todd, br c (2), by Bingen; dam, Fanella, by Arion (Carpenter).....Time, 2.21.
Same day—2.07 pace. Purse, \$1500.
Riley B., blk h, by Happy Riley; dam, Belle B., by Johnny Harris (Ervin).....2 1 1 1
Major Muscovite, b h, by Muscovite (McMaben).....1 4 5 6
Art Alon, b g, by Alonzo (Dore).....3 3 3 3
Mazette, b m, by Tennessee Wilkes (McDonald).....6 2 2 2
Eylet, gr m, by Gansetta Wilkes (Kenney).....4 5 4 4
Joe Pilot, b g, by Delinctor (Kilbourn).....5 6 4 5
Time, 2.01, 2.07, 2.08, 2.10.

Same day—2.12 trot, two in three. Purse, \$1500.
Allright, b g, by Enright; dam, untraced (Hyde).....6 1 1
Dolly Bidwell, blk m, by Ingleswood (Carpenter).....1 3 3
Neva Simmons, b m, by Simmons (Price and Geers).....2 2 2
Confessor, ch g, by Constantine (Bowen).....4 2 2
Time, 2.07, 2.08, 2.10.

Same day—2.14 trot, 2 in 3. Purse, \$1500.
Susie J., rf m, by Jayhawker; dam, Millonaire, by Norwood (McKee).....8 1 1
Miss Whitcomb, b m, by Edgemont (A. H. Donald).....1 1 3 13
Alkalone, blk h, by Wilton (Dore).....2 4 2
Glory, ch g, by Sir Walter Jr. (Paige).....4 2 3
Eula Mc, b m, by McKinney (Sanders).....3 10 12
Capt. Bracken, b g, by Earl Battle (Ervin).....7 9 4
Coxey, b g, by Judge Cox (Spear).....6 5 9
Bird Eye, ch h, by Prince Belmont (Higgs).....5 7 7
Prince of India, br h, by Baron Wilkes (Lyons).....13 12 5
May C., b m, by Superior (James).....11 8 6
Listerine, b m, by Atholton (Clark).....9 6 10
Axtell, b g, by Axtell (Marsh).....10 8 8
Hunter Hill, b g, by Sam Hill (Humphreys).....12 13 11
Lita W., br m, by George Simmons (Hutchings).....14 14 14
Ebba, gr m, by Red Wilkes (Winings).....14 14 14
Time, 2.12, 2.13, 2.15.

Readville, Mass., Aug. 22, 1901—2.25 pace. Purse, \$1000. Two heats paced Aug. 21.
Frazier, ch g, by Sphinx (McHenry).....1 1 1

Readville, Mass., Aug. 23, 1901—The News set 2.10 pace, 2 in 3. Purse, \$5000.
Sphinx S., ch g, by Sphinx; dam, Winnie S., by Passas (Spear).....7 7 1 1
Daphne Dallis, br m, by Quarter Master (Herbert).....8 8 1 1
Sophia, b m, by Amerson Wilkes (Lindley).....10 10 1 1
The Bishop, b g, by Arget Wilkes (Berry).....6 6 1 1
Davallo, br g, by King Turner (J. O'Neill).....6 6 1 1
Ambulator, b h, by Ambassador (Bass).....12 12 1 1
Balm L., b m, by Bamboo (Turner).....12 12 1 1
Norvin G., br g, by Norval (Gillies).....12 12 1 1
Betonia, b h, by Azmoor (Marsh).....7 7 1 1
Luna, b m, by Bourbon Wilkes (Carpenter).....12 12 1 1
Carmine, b g, by Symboler (Golden).....12 12 1 1
Fred S. Wedgwood, rf h, by Fred S. Wilkes (Noble).....12 12 1 1
Marly Bird Jr., br g, by Early Bird (Payne).....12 12 1 1
Rey Direct, blk h, by Direct (Geel).....dis
Hal McEwen, ch g, by McEwen (Garth).....dis
Time, 2.08, 2.10, 2.09, 2.10, 2.10.
Same day—2.08 trot, 2 in 3. Purse, \$2500.
Borlana, ch g, by Boreal; dam, Earline, by Earl (Gatcomb).....dis
The Monk, b g, by Chimes (Noble).....dis
Kingmond, b g, by King Darlington (Marsh).....dis
Toggles, br g, by Strathway (Clark).....dis
Time, 2.08, 2.07.
Same day—2.16 trot, 3 in 5. Purse, \$1000.
Maurine, b m, by Hunter Wilkes; dam, Sally B., by Lever (Turner).....dis
Belle Curry, ch m, by Simmons (Marsh).....dis
Sylph H., ch m, by Acmon (Spear).....dis
Free Silver, b h, by Col. Simmons (McHenry).....dis
Marion Wilkes, b m, by Hawthorne Wilkes (Titer).....dis
Pug, gr g, by Deauwood (Barnes).....dis
Freue, br m, by Eagle Bird (Kane).....dis
Burlington Boy, ch g, by Alexander (Ames).....dis
J. E. C., b g, by Tribute (W. O'Neill).....dis
Frie, b g, by Goodbody (Lindley).....dis
Time, 2.13, 2.15, 2.14.
Same day—2.19 pace, 2 in 3. Purse, \$1000.
Terrace Queen, br m, by Valpeau; dam, Lodi (Shaffer).....dis
Orin R., b g, by Grey Stone (McVey).....dis
Blassa, b g, by Roy Mason (Kenney).....dis
Tommy Mc, b g, by Jersey Wilkes (McCartney).....dis
Thornway, b h, by Bayard Wilkes (Paige).....dis
Ralph R., b h, by Bayard Wilkes (Paige).....dis
Annie B., ch m, by Brandon (Tyson).....dis
Burnham, b g, by Carriage (Brennan).....dis
Time, 2.12, 2.11.
Same day—2.11 pace, 2 in 3. Purse, \$1000.
Reuben S., b g, by Strathford (Rank).....dis
Miss Gertrude, br m, by Coastman (Hudson).....dis
Carmelita, b m, by Cornelia (McMahon).....dis
Maud Emperor, ch m, by Emperor Wilkes (Spe r).....dis
Time, 2.12, 2.12.

EXCURSION TO CENTRE HARBOR.

Sixty Miles Sail on Lake Winnepesaukee.

Centre Harbor is one of the many delightful towns which border along Lake Winnepesaukee. Because of its high altitude and beautiful surroundings, it is a popular retreat for hundreds of summer visitors.

Lake Winnepesaukee, on account of the beautiful environment and borderlands, is an especially pretty place for an excursion.

The lake is sixty miles long and over seven miles wide. The water is very clear, a person being able in some parts to see a depth of forty feet.

Over three hundred islands cover the surface of the lake, and on these many people from all parts of the United States pass their summer. Some of the islands are inhabited all the year round, and located on these islands are some very profitable farms.

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The many small ports along the shores of the lake are reached by the splendid boat which traverses the lake, the Steamer Mt. Washington. From the decks of this steamer the view of the mountains surrounding the lake is magnificent.

On Saturday, Sept. 7, the people of Boston all have an opportunity to visit Lake Winnepesaukee and enjoy a day's outing on the lake. The Boston & Maine Railroad will run a special train, leaving the Union Station, Boston, at 8:20 A. M. for Alton Bay, connecting there with Steamer Mt. Washington for a five hours sail on the lake.

The rate for the round trip is only \$2. Tickets will be limited in number, and will be on sale at City Ticket Office, 322 Washington street, Boston, until 5 P. M. on Sept. 6, and at Union Station Ticket Office after 6 P. M. on Sept. 6, unless supply is previously exhausted.

Stick a pin in it. You buy the sample bale for your horse. German Peat Moss will do the rest. Write to C. B. Barrett, Importer, Boston, for circular.

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